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THE INDIVIDUAL AND COMBINED EFFECTS OF
CEO HUMILITY, CEO NARCISSISM, AND CEO
COMPETENCE ON FIRM PERFORMANCE

A dissertation

Presented to

The Faculty of the C.T Bauer College of Business

University Of Houston

In Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

By

Tiffany Maldonado

August 2015

THE INDIVIDUAL AND COMBINED EFFECTS OF CEO HUMILITY, CEO NARCISSISM, AND CEO COMPETENCE ON FIRM PERFORMANCE

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ABSTRACT

While humility as a characteristic of top managers has attracted increasing attention in recent years, there are still many misconceptions about what humility actually is, and about how a humble CEO could benefit or harm a firm's performance. In contrast to the case of humility, the leadership traits of narcissism and competence are often emphasized as desirable. This study challenged the view of humility as associated with shyness or lack of self-esteem, and, in contrast, positioned it as a critical strength for strategic leaders possessing it, and a dangerous weakness for those lacking it. Humility was conceptualized as having five dimensions: accurate self-awareness, appreciation of others, teachability, low self-focus, and self-transcendent pursuits.

The primary purpose of the study was to examine the impact of CEO humility on firm outcomes. Furthermore, I argued that humility can not only coexist with CEO competence, and with some degree of CEO grandiose and vulnerable narcissism, and, but that the most benefit for companies occurs when the CEO embodies combinations of these characteristics. To test my model, I developed and validated a new unobtrusive measure of CEO humility, through two pilot studies, and used a sample of 102 male CEOs to test my hypotheses. The findings showed partial support for the positive effects of CEO humility on firm performance, and partial support for the positive moderating effect of CEO humility on the relationship between CEO grandiose narcissism and performance performances. Post-hoc analyses explored the dimensionality of the humility and competence variables, and examined the relationships included in my model by using individual items and dimensions of these two constructs.

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INTRODUCTION

Upper echelon theory (Hambrick & Mason, 1984) states that the characteristics of a strategic leader influence organizational outcomes, and that the organization is a reflection of its top leaders. One characteristic that is attracting increasing attention recently is that of humility (Owens, Johnson, & Mitchell, 2013; Owens & Heckman, 2012; Ou, Tsui, Kinicki, Waldman, Song, & Xiao, 2013), defined as a willingness to see the self accurately, an appreciation of the contributions of others, and teachability. The interest in humility is consistent with the call by Crossan, Mazutis, Seijts and Gandz (2013) to refocus business practice and business education from an over-appreciation of the role of competences in leaders to a greater awareness of the critical role of leadership character in business success. Although including humility and competitiveness in the same sentence may seem an oxymoron (Vera & Rodriguez-Lopez, 2004), humility has been associated to outcomes such as psychological freedom, follower engagement, trust, loyalty, team learning goal orientation, continuous small changes, and fluidity in organizing, among others (Harvey & Pauwels, 2004; Owens et al., 2013; Owens & Heckman, 2012). Nevertheless, little is known about the impact of humility on an organizational scale, and ultimately on the firm's bottom line. Additionally, we do not know what contingencies and boundary conditions impact this relationship. Questions about the "when," "where," "who," and "to whom" of humility still need to be answered.

With the number of organizational scandals increasing, there is a need for leaders that refuse to jeopardize organizational survival for the sake of ego, hubris, or selfish gain. In "Good to Great", Collins (2001) identified several humble leaders at the helm of some of the more successful organizations of that time, such as Darwin Smith of

Kimberly Clark, Coleman Mockler of Gillette and George Cain of Abbott Laboratories (Collins, 2001). Nevertheless, humility is often seen as a virtue not worth pursuing at the highest levels of the organization, while traits such as narcissism, and competence are greatly emphasized as desirable (Galvin, Waldman & Balthazard, 2010; Tang, Li & Yand, 2012). This study challenges this view by looking at humility at the highest level of leadership of the organization and arguing that humility is a critical strength for leaders possessing it, and a dangerous weakness for those lacking it. The primary purpose of the research is to examine the impact of CEO humility on firm outcomes, and the relationships among CEO humility, CEO narcissism, and CEO competence, by answering the following questions: (1) How does CEO humility impact firm performance? (2) How does CEO humility relate to CEO grandiose and vulnerable narcissism, and CEO functional and cognitive competence? (3) What are the effects of CEO grandiose and vulnerable narcissism and CEO functional and cognitive competence on firm performance, in the presence and in the absence of CEO humility?

This research contributes to the strategic leadership literature in multiple ways. First, in contrast to work that has looked at humility at supervisory levels of the organization, I conceptualize humility at the upper echelon level as encompassing five CEO humility behaviors: (1) self-awareness, (2) appreciation of others, (3) teachability (4) low self-focus and (5) self-transcendent pursuits. As cumulative empirical research on humility becomes more available, researchers will be able to detect if there are different manifestations of humility at different organizational levels. I seek to add to this evidence by focusing on studying humility at the CEO level. Second, this study unpacks the benefits and disadvantages for an organization of having a top manager who is humble.

In positioning humility as a virtue, and a dimension of character, I build on work that studies the “bright” side of leadership, including work on virtues and character strengths (Peterson & Seligman, 2004), positive leadership (Cameron, 2012), positive organizational scholarship (Cameron & Spreitzer, 2011), and leadership character (Crossan et al., 2013). Third, I explore contingencies associated with humility by addressing “when” questions about the coexistence and combined effects of CEO humility, CEO narcissism, and CEO competence. In doing this, I go beyond recommendations of “the more the better” to provide a more realistic and nuanced picture of the complexities of top leaders’ characteristics. Finally, by theorizing about the joint effects of CEO humility, narcissism, and competence, I also contribute to the emerging debate about the entanglement between leader character and leader competences. Gandz, Crossan, Seijtzt and Reno (2013: 21) have stated that “while competencies matter, while commitment is critical, character really counts,” and Sosik, Gentry, and Chun (2012) provided one of the few tests of the differential effects of CEO character and competences on firm performance. I seek to contribute to this debate by focusing on a dimension of character—humility--, a personality trait that is not part of character—narcissism, and two types of competencies.

On the empirical side, an important contribution of this work is that it develops and validates a new measure of CEO humility behaviors that uses unobtrusive data including CEO profiles, news releases, and letters to shareholders. Measures of humility are scarce and have not been developed to capture humility in upper echelons. This research design includes multiple steps of measurement development with two pilot tests used to validate the new measure of CEO humility behavior.

This research has relevant implications for managers and for leadership development programs at the highest levels of organizations by providing direction on when the leadership traits of humility, narcissism, and competence work in harmony together or in discord, and by highlighting which combinations are advantageous and which are to be avoided. Furthermore, my findings guide leadership development experts about the relationship between personality traits, character strengths, and competences and their effects on the bottom line of the organization.

In the following sections, I start by reviewing the literature about what is known, and not known, about humility. I also present a multidimensional definition of humility in business and differentiate this construct from other related concepts. I then introduce my conceptual model of how CEO humility impacts organizational outcomes both directly and in combination with CEO grandiose and vulnerable narcissism and CEO competence. Finally, I present the research design, results and findings before concluding with implications for research and practice.

LITERATURE REVIEW

Definition of humility

Humility is a virtue of temperance; it helps to guard against excess and to ground one's self-perceptions (Park & Peterson, 2001). In fact, the word for humility has roots in the Latin word humus meaning 'earth' (Online Etymology Dictionary, 2012). It draws its roots from philosophical and religious backgrounds. Unlike the case of other virtues, which follow the definition of a virtue in being a behavior showing high moral standards and considered a desirable in a person, (Online Oxford Dictionary, 2013) the value of the virtue of humility is sometimes questioned. In the management literature, humility has often been erroneously confused with low self-esteem, shyness, lack of confidence and lack of ambition; however, it is more precisely thought of as an accurate depiction of oneself (Vera & Rodriguez-Lopez, 2004). The definitions and dimensions of humble leadership vary among scholars, as seen in Table 1.

Table 1: Definitions and Dimensions of Humility

Definition	Dimensions	Source
Looked at humility in eastern culture	<ul style="list-style-type: none"> • having an accurate view of self • recognizing follower strengths and achievements • modeling teachability and being correctable • leading by example • showing modesty • working together for the collective good • empathy and approachability • showing mutual respect and fairness • mentoring and coaching 	Oc et al, 2015
Grounded in a self-view of accepting that something is greater than the self and manifests in self-awareness, openness to feedback, appreciation of others, low self-focus, and self-transcendent pursuit.	<ul style="list-style-type: none"> • Self-awareness • Openness to feedback • Appreciation of others • Low self-focus • Self-transcendent pursuit • Transcendent self- concept 	Ou et al, 2014
An interpersonal characteristic that emerges in social contexts that connotes (a) a manifested willingness to view oneself accurately, (b) a displayed appreciation of others' strengths and contributions, and (c) teachability.	<ul style="list-style-type: none"> • Manifest willingness to see self accurately • Appreciation of strength and contributions of others • Teachability 	Owens et al., 2013
A developmental orientation that is grounded on a self-concept of subordinating oneself to an ideal, and it is manifested as (1) self-awareness and self-improvement,(2) other appreciation and other enhancement, and (3) self-transcendent pursuit and low self-focus	<ul style="list-style-type: none"> • Self-awareness and self-improvement • Other appreciation and other enhancement • Self-transcendent pursuit and low self-focus 	Ou, 2011
A desirable personal quality that is an understanding of oneself through awareness of personal identities, strengths, and limitations, in addition to perspective of the self's relationship with others	<ul style="list-style-type: none"> • Understanding of self • Perspective in relationships with others 	Nielsen, Marrone & Slay, 2010

Table 1: Definitions and Dimensions of Humility (cont'd)

Definition	Dimensions	Source
A personal orientation founded on a willingness to see the self accurately and a propensity to put oneself in perspective	<ul style="list-style-type: none"> • Self-awareness • Openness • Transcendence 	Morris et al., 2005
A realistic assessment of one's own contribution and the recognition of the contribution of others, along with luck and good fortune that made one's own success possible.	<ul style="list-style-type: none"> • Open to new paradigms; • Eager to learn from others; • Acknowledgment of own limitations and mistakes, and attempts to correct them; • Acceptance of failure with pragmatism; • Asking for advice; • Development of others; • Genuine desire to serve; • Respect for others; • Sharing honors and recognition with collaborators; • Acceptance of success with simplicity; • Rejection of adulation; • Avoidance of self-complacency; • Frugality 	Vera and Rodriguez-Lopez, 2004
	<ul style="list-style-type: none"> • Accurate self-assessment of abilities and achievements • Self-awareness of one's mistakes and limitations • Openness to new ideas, information and advice • Keeping one's abilities and accomplishments in perspective • Low self-focus • Appreciation of the value of all other things 	Tangney 2000

Humble individuals are thought to understand that they and others have strengths and weaknesses (Ou, 2011), are willing to seek self-knowledge and constant improvement (Owens, 2009; Peterson & Seligman, 2004; Tangney, 2002) and do not settle for self-complacency (Vera & Rodriguez-Lopez, 2004). More recently, Owens et al. (2013) developed the notion of “expressed humility,” which is an interpersonal characteristic that emerges in social contexts via a manifest (a) willingness to see the self accurately, (b) an appreciation of the strength and contribution of others, and (c) teachability. Shortly after, Ou et al. (2014) define humility as six dimensions where humility is grounded in a self-view that accepts that something is greater than the self. The authors propose that humility is manifest in self-awareness, openness to feedback, appreciation of others, low self-focus, self-transcendent pursuit and transcendent self concept, which is an expansion from the original three facets that Ou (2011) proposed. The authors view each dimension of humility being motivated differently with transcendent self-view as the cognitive core and low self-focus and self-transcendent pursuit as deep-level motivations, while both cognition and motivation drive behavioral manifestations of self-awareness, openness to feedback, and appreciation of others. Ou et al. (2014) assert that individuals may exhibit humble behaviors without incorporating the dimension of a transcendent self-view, that such behaviors may be inauthentic or inconsistent over time. Oc, et al (2015) explored humility in a cross-cultural context and found nine dimensions of humility in an eastern culture: 1) having an accurate view of self, 2) recognizing follower strengths and achievements, 3) modeling teachability and being correctable, 4) leading by example, 5) showing modesty, 6) working together for the collective good, 7) empathy and approachability, 8) showing mutual respect and

fairness, and 9) mentoring and coaching. These dimensions are an expansion of the dimensions recently seen in western definitions of humility.

Even though there are various perspectives of what humility is and what leadership behaviors humble leaders exhibit, there is consensus that humility generally consists of three aspects: (a) humble leaders view themselves more objectively, (b) they view others more appreciatively, and (c) they are more open to new ideas, information and opinions (Exline & Geyer, 2004; Ou, et al, 2014; Owens, 2008; Owens, Johnson, & Mitchell, 2013; Tangney, 2000). Several definitions consider the motivations and cognitive biases of humility; however, to study the influence of strategic humble leadership, researchers benefit from a definition that allows for externally observable behaviors at the top levels of the organization. CEOs often serve as figureheads and participate in symbolic behaviors such as visiting sick to enhance distant leadership (Waldman & Yammarino, 1999) and their non-work actions often have financial repercussions on the organization. As such, CEOs are very aware of their actions and are not as free as lower level leaders are in their actions, very much like the proverb “with great power, comes great responsibility”. I expand upon these prior definitions and define CEO humility behaviors in five dimensions: (1) self-awareness, (2) appreciation of others, (3) teachability (4) low self-focus and (5) self-transcendent pursuits. In this research, I look at CEO humility as a group of externally observable behaviors that can be perceived by others. A list of these CEO humility behaviors and a proposed measurement for each behavior can be found in Table 2.

Table 2: Final CEO Humility behavior coding form

Humility Dimension	Observable Behavior	Example	Coding
Accurate self awareness	Accepts blame and admits weaknesses	CEO apologizes for company performance or past mistakes	Number of incidents in letter to shareholders (ASA)
Appreciation of others	Acknowledges contributions of others	CEO spotlights the contributions of others	Number of incidents in letter to shareholders (AO)
Teachability	Educational Breadth	Number of different majors the CEO pursues	Count measure of different categories of majors (TEACH1)
	CEO advice seeking	CEO seeks advice from members at any level of organization, outside the organization or from shareholders	Number of incidents in letter to shareholders (TEACH2)
Low self focus	Financial compensation compared to (a) TMT compensation and (b) average employee compensation	CEO salary divided by top three salaries in the organization	CEO salary divided by top three salaries in the organization (LSF2)
		CEO salary divided by average employee compensation	CEO salary divided by average employee compensation (LSF3)
		CEO Total compensation divided by average employee compensation	CEO total compensation divided by average employee compensation (LSF10)
Self-transcendent pursuits	Charity board participation	CEO (1) sits on (2) chairs and/or (3) founded a number of charity boards	Number of charity boards a member of, chair of and a founder of (STP)

Humility is not a dichotomous virtue where individuals are either humble or they are not humble. Instead humility can be thought of as a continuum, where individuals possess different levels of humility ranging from low to high levels of humility. Vera and Rodriguez-Lopez, maintain that a “low or moderate level of humility is common ...high levels of humility manifested in the behavior of the leaders and practices of the firm are rare” (2004: 397). In the continuum of humility, leaders will diverge in their dimensions of humility in that some leaders will have varying levels of self-awareness, appreciation for the contribution of others, teachability, low self-focus and self-transcendent pursuits.

Constructs associated with humility

Humility has often been discussed in positive association with the constructs of modesty, servant leadership, and authentic leadership and in negative association with narcissism, Machiavellianism, and psychopathy (Graham, 1991; May, Chan, Hodges & Avolio, 2003; Morris, Brotheridge & Urbanski, 2005; Van Dierendonck, 2010; Owens et al., 2011; Owens & Hekman, 2012; Owens, et al., 2013). Each construct is uniquely different in spite of some commonalities. Table 3 summarizes the relationships between humility and these constructs.

Table 3: Discriminant validity among CEO humility behaviors and related constructs

Constructs	Dimensions of CEO Humility Behaviors					Comments about comparison
	Self-awareness	Appreciation of others	Teachability	Low self-focus	Self-transcendent pursuits	
Modesty		X		X		Modesty is externally focused (Peterson & Seligman, 2004; Morris et al. 2005) on not focusing attention on the self but on others. Modesty is a subset of humility. Humble people are modest, but modest people are not necessarily humble.
Vulnerable Narcissism	X			X		The opposite dimensions are high self-focus and poor self-awareness (in contrast to accurate self-awareness). Vulnerable narcissism is not defined in terms of appreciation of others, teachability, and self-transcendent pursuits.
Grandiose Narcissism	X			X		The opposite dimensions are high self-focus and inflated view of self (in contrast to accurate self-awareness). Grandiose narcissism is not defined in terms of appreciation of others, teachability, and self-transcendent pursuits.

Table 3: Discriminant validity among CEO humility behaviors and related constructs (cont'd)

Constructs	Dimensions of CEO Humility Behaviors					Comments about comparison
	Self-awareness	Appreciation of others	Teachability	Low self-focus	Self-transcendent pursuits	
Servant leadership		X		X	X	Servant leadership focuses on being a servant first and a leader second to the organization and followers (Gillet, Cartwright & Van Vugt, 2010),
Authentic leadership	X					Focuses on authenticity and self-awareness (Gardner, et al., 2005; Reed, et al., 2011)
Machiavellianism		X				Focuses on manipulation, a cynical view of others, and moral outlook putting expediency above principles.
Psychopathy		X				Shows lack of concern for other people, impulsivity, and a lack of guilt when their actions harm others, low empathy and anxiety.

Humility and modesty

"I'm not modest. I have no modesty. Modesty is a learned behavior.

But I do pray for humility, because humility comes from the inside out."

Maya Angelou

Modesty, the moderate estimate of one's merits or achievements (Peterson & Seligman, 2004; Owens et al., 2011; Tangney, 2000), is focused on *not* drawing attention to oneself (Ashton & Lee, 2005; Morris et al., 2005; Owens et al., 2013). Like humility, modesty is misunderstood and not completely appreciated in the western culture (Harvey & Pauwels, 2004), particularly at leadership levels. Modesty and humility are similar in that they both acknowledge the contributions of others (Neilsen, Marrone & Slay, 2009), which is associated to the behavior of spotlighting others. However, modesty differs from humility in that the core of modesty is low self-focus -- not wanting to draw others' attention on oneself -- (Peterson & Seligman, 2004; Morris et al. 2005), while humility is broader concept with a strong motivation for self-awareness, personal development, and learning (Owens et al., 2013). Overall, modesty can be seen as a subset of humility because it addresses two of the humility behaviors identified earlier: low self-focus and appreciation of others. However, humility goes beyond modesty because modesty does not speak about the behaviors of self-awareness, teachability, and self-transcendent pursuits.

Humility and servant leadership

“There is no respect for others without humility in one's self.”

Henri Frederic Amiel

Servant leadership focuses on the key roles of serving and nurturing followers rather than chasing power and prestige, and putting the interests of the organization above personal interests (Greenleaf, 1970; Barbuto & Wheeler, 2006; Reed, Vidaver-Cohen & Colwell, 2011; Owens & Hekman, 2012). ‘Going beyond one’s self-interest’ has been identified as the core characteristic of servant leadership (Van Dierendonck & Nuijten, 2011). In addition, Sendjaya and Sarros (2002) suggest that the distinguishing elements of servant leadership are its primary intent (what the servant leader does) and self-concept (who the servant leader is), which implies that servant leadership is not only about ‘doing’ the acts of service but also ‘being’ a servant.

Some scholars propose that humility is a dimension of servant leadership (Graham, 1991; van Dierendonck, 2010), while others suggest that humility as a motivation for servant leadership (Morris et al., 2005). Yet, a third set of scholars states that humility and servant leadership are separate constructs with some overlap (Owens & Hekman, 2012). Servant leadership is similar to humility in that a servant leader admits mistakes and spotlights others (Owens & Hekman, 2012). A difference is the explicit emphasis servant leadership puts on service to others and the organization. In fact, servant leadership focuses on being a servant first and a leader second, and on making conscious decisions to lead in order to serve others better, not to increase the leader’s power (Gillet, Cartwright & Van Vugt, 2010). In contrast, the five dimensions of humility are not explicit about the leader servicing others.

Humility and authentic leadership

“Pride makes us artificial and humility makes us real.”

Thomas Merton

Authentic leadership is defined as a process that draws from both positive psychological capacities and a highly developed organizational context, which results in both greater self-awareness and self-regulated positive behaviors on the part of leaders and associates, fostering positive self-development (Avolio & Gardner, 2005; Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008). Authentic leadership focuses on authenticity and self-awareness, self-acceptance, and authentic actions and relationships (Gardner, Avolio, Luthans, May, & Walumbwa, 2005; Reed, Vidaver-Cohen & Colwell, 2011).

Like in the case of servant leadership, some scholars propose that humility is a dimension of authentic leadership (May et al., 2003) and that authentic leadership and servant leadership also overlap (van Dierendonck, 2010), while yet another set of scholars provide evidence that the constructs are conceptually different (Owens et al., 2011). Authentic leadership is similar to humility in that both feature an importance on accurate self-awareness (Gardner et al., 2005; Morris et al., 2005; Owens et al., 2013). However authentic leadership does not address the dimensions of teachability, spotlighting others, low self-focus and self-transcendent pursuits.

Humility and narcissism

*“It was pride that changed angels into devils;
it is humility that makes men as angels.”*

Saint Augustine

Narcissism was first coined by Havelock Ellis and Sigmund Freud later described it as a personality disorder where the need for power and self-loving is at its core (Chatterjee & Hambrick, 2007). Like humility, narcissism has various definitions, dimensions, operationalizations and perspectives. Narcissism is a multifaceted personality dimension that is defined as the degree to which an individual has an inflated sense of self and is preoccupied with having that self-view continuously reinforced (Campbell, Goodie, and Foster, 2004; Gerstner, Konig, Enders, & Hambrick, 2013). Even though narcissism can be a pathological personality disorder, most researchers agree that everyone has varying degrees of narcissism with only a few having the rare pathological clinical disorder (Gerstner, Konig, Enders, & Hambrick, 2013; Maccoby, 2004; Nevicka, De Hoogh, Van Vianen, Beersma & McIlwain, 2011).

On the non-pathological range, people with higher levels of narcissism tend to have a self-centered perspective, feelings of superiority and grandiosity, and a drive for personal power and glory (Galvin, Waldman & Balthazard, 2010; Maccoby, 2004). Highly narcissistic individuals view themselves as extremely intelligent and superior, often rating themselves higher than warranted on a vast array of measures (Chatterjee & Hambrick, 2011). These individuals tend to be exploitative, arrogant and enjoy holding authority over others (Galvin, Waldman & Balthazard, 2010). Narcissistic individuals often display characteristics of a grandiose sense of self-importance, a preoccupation with

fantasies of unlimited success or power, a belief in a unique status, a need for excessive admiration, unreasonable expectations of entitlement, interpersonal exploitativeness, a lack of empathy, strong envy and arrogant behaviors or attitudes (Rosenthal & Pittinsky, 2006).

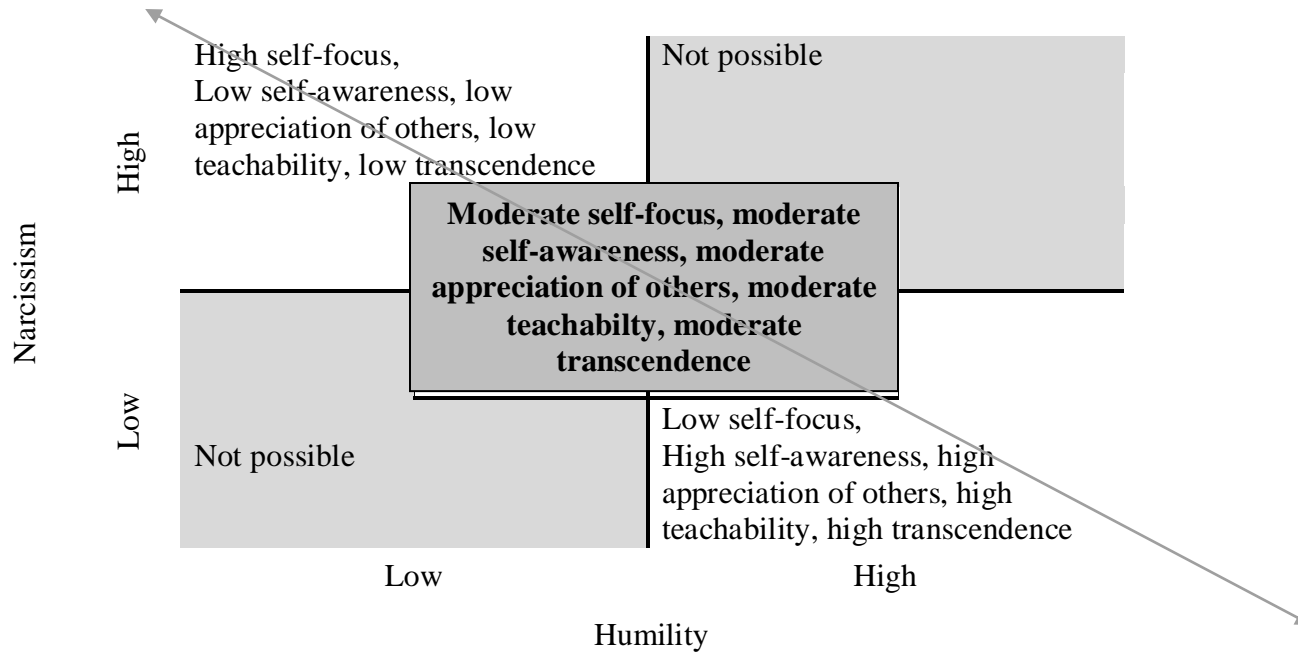
More recently, narcissism has been explored as a heterogeneous construct with two “flavors”, vulnerable narcissism and grandiose narcissism (Campbell, Hoffman, Campbell, & Marchisio, 2010; Miller, Hoffman, Gaughan, Gentile, Maples, & Campbell, 2011). Grandiose narcissism is depicted by overt grandiosity with individuals having a sense of entitlement and preoccupation with a need for admiration; while vulnerable narcissism is depicted as a hypersensitivity to criticism and a tendency to withdraw from social interactions (Campbell, Hoffman, Campbell, & Marchisio, 2010; Miller, Hoffman, Gaughan, Gentile, Maples, & Campbell, 2011). Both flavors of narcissism encompass arrogance, self-absorption, entitlement, and volatile swings ranging from grandiosity to worthless self-esteem, (Rosenthal & Pittinsky, 2006; Chatterjee & Hambrick, 2007; Owens et al., 2013).

Several scholars have suggested humility as being anti-narcissism or the opposite of narcissism (Peterson & Seligman, 2004; Morris et al., 2005; Chatterjee & Hambrick, 2007), however, more recently, researchers are describing this relationship as much more complex (Owens, 2012). When comparing humility to grandiose and vulnerable narcissism, the three constructs contain some aspects that can be considered opposite, but also include other aspects that do not conceptually overlap in terms of definitions and behavioral manifestations, and that could suggest coexistence of certain levels of humility with certain levels of narcissism. More specifically, humility’s dimension of low self-

focus relates negatively to grandiose and vulnerable narcissism's dimension of high self-focus (Ou et al, 2014). Humility's dimension of accurate and realistic self-awareness is different from the inflated sense of self found in grandiose narcissists and the low self-esteem found in vulnerable narcissists (Campbell et al, 2010; Houlcroft, Bore, & Munro, 2012). While a grandiose narcissist has an over-inflated view of the self, a humble manager can have realistic self-awareness of her outstanding competence. Similarly, while a vulnerable narcissist struggles with low self-esteem, a humble manager can have a realistic self-awareness of personal weaknesses that need to be addressed. That is, highly humble leaders have an accurate awareness of their strengths and weaknesses as compared to grandiose narcissistic leaders who would emphasize their strengths and neglect their weaknesses, and vulnerable narcissist leaders who would internally emphasize their weaknesses, but externally not show these weaknesses. Another difference between both flavors of narcissism and humility is that narcissism does not capture in its core construct definition the aspects of appreciation of the contribution of others, teachability, and self-transcendent pursuits.

Figure 1 summarizes the relationship between humility and narcissism, where it would be impossible for humility and narcissism to coexist at high levels or low levels, given that humility has a low self-focus and narcissism has a high self-focus. However, humility and narcissism can coexist at moderate levels of self-focus.

Figure 1: Combinations of Humility and Narcissism



Humility and Machiavellianism

*“Real genius is nothing else but the supernatural
virtue of humility in the domain of thought.”*

Simone Weil

Machiavellianism is a personality characteristic manifested through the use of deception and manipulation to achieve power, status, or material wealth (Paulus & Williams, 2002; Verbeke, et al 2011) via three dimensions of manipulation, a cynical view of others, and moral outlook putting expediency above principles (O’Boyle et al, 2012). While the cynical view of others of Machiavellianism appears the opposite of humility’s appreciation of others, humility is not low Machiavellianism because several core aspects of both constructs do not overlap. Humility does not explicitly encompass deception and manipulation, and Machiavellianism does not explicitly encompass low self-focus, accurate self-awareness, teachability, and self-transcendent pursuits.

Humility and psychopathy

“Humility is not thinking less of yourself, it's thinking of yourself less.”

C. S. Lewis

Psychopathy is a subclinical personality characteristic marked by a lack of concern for other people, impulsivity, and a lack of guilt when their actions harm others, low empathy and anxiety (O’Boyle et al, 2012; Paulus & Williams, 2002). Like in the case of Machiavellianism, the constructs of humility and psychopathy do not overlap in all its core aspects. Humility is not low psychopathy due to the fact that humility does not

capture the aspects of low empathy, anxiety, impulsivity and lack of guilt and concern.

In summary, humility as a construct is part of a rich nomological network that includes concepts such as modesty, servant leadership, authentic leadership, narcissism, Machiavellianism and psychopathy. I have proposed that humility goes beyond modesty, is not the exact opposite of narcissism, and doesn't overlap the constructs of Machiavellianism or psychopathy, except in the view of others. Also, humility is not a leadership style like servant leadership and authentic leadership, and does not have an explicit focus on servicing others or relating with authenticity. Humility is a virtue with unique characteristics and behaviors. In fact, among all the constructs I have discussed, humility--with its dimensions of accurate view of self, spotlighting others, teachability, low self-focus and self-transcendent pursuits-- is the most explicit about learning behaviors. As Crossan, Gandz, and Seijts (2012:6) summarize: "Without humility leaders cannot be open-minded, and solicit and consider the views of others. They can't learn from others, they can't reflect critically on their failures and become better leaders as a result of those reflections. They become caricatures of themselves. Isolation results." In the next section, I present my model of the direct and contingent effects of humility on firm outcomes.

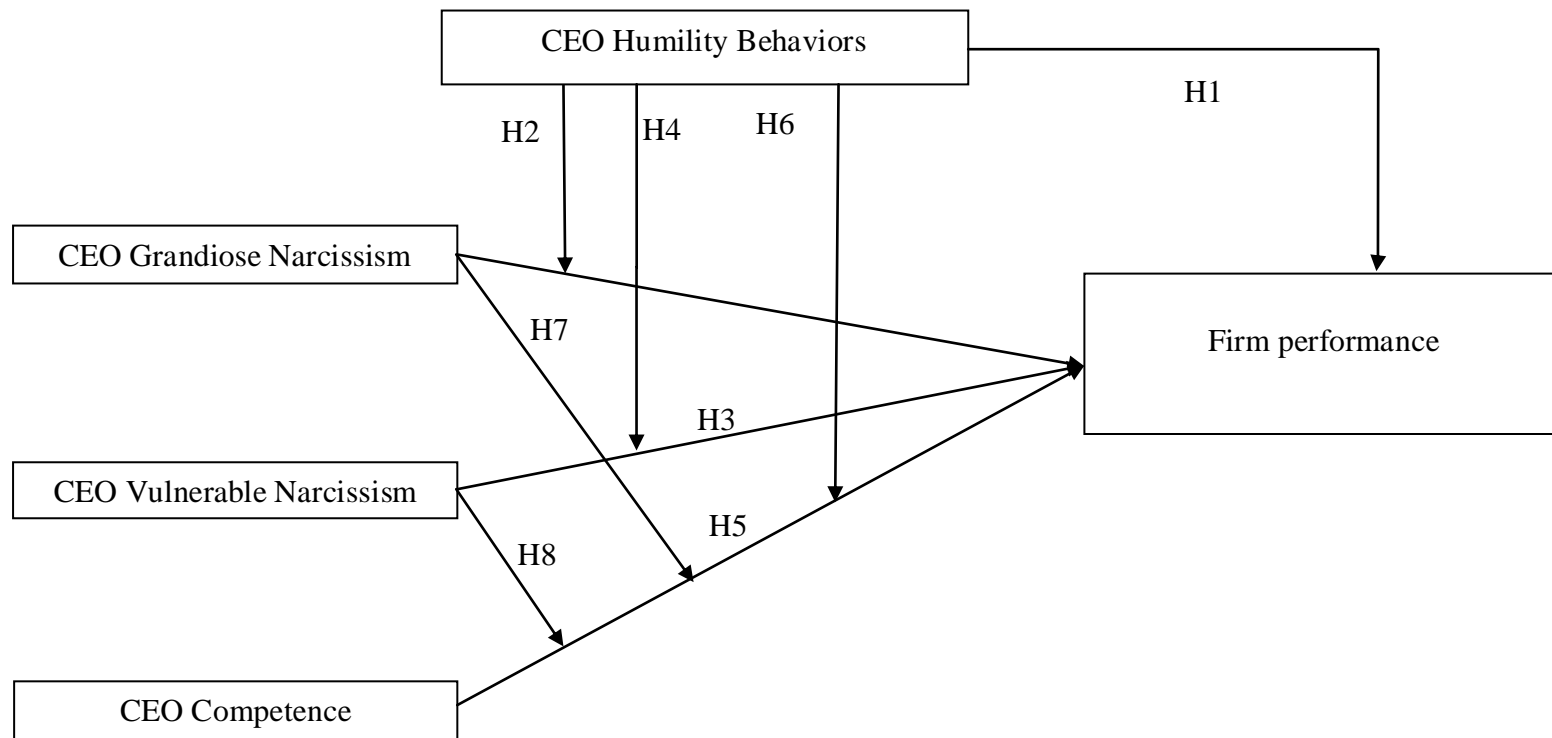
THEORETICAL MODEL

In their seminal piece, Hambrick and Mason (1984) presented a model in which top executives perform a crucial role in influencing major organizational outcomes. The authors maintain that characteristics of the upper echelons in the organization influence the decisions made and the performance of the firm. The basic theory of upper echelons focuses on the cognitions, values and perceptions of the strategic leader and the resultant performance outcomes. These unobservable characteristics are often indicated by observable proxies (Carpenter, Geletkanycz & Sanders, 2004). While humility is often thought to be unobservable in its true form, with people being able to display “false humility” (Owens & Hekman, 2012), Owens et al., (2013) developed the concept of “expressed humility” to tap into the unobservable “true humility”. Owens and Hekman (2012) found that “expressed leader humility” influenced various outcomes, including individual performance, job satisfaction, learning goal orientation, employee job engagement, and turnover. What has not been studied is the impact of humility on an organizational scale, and ultimately on the firm’s bottom line.

Figure 2 presents my model of the impact of CEO humility behaviors on firm performance. The model proposes that leader humility positively impacts firm performance. I also include the leader characteristics of grandiose narcissism, vulnerable narcissism and competence, which tend to be over-valued in our society. Narcissism has gained new popularity because it has been linked to the leadership style of Steve Jobs and the successful run of Apple in the last decade (Maccoby, 2004). Competence represents the knowledge, skills, concepts, facts, and relationships usually gained through business education and industry experience (Crossan et al., 2012). While past research has

associated narcissism, and competence to business success (e.g., Awamleh & Gardner, 1999; Campbell, Hoffman, Campbell, & Marchisio, 2010; Pollach & Kerbler, 2011), the enhancing value provided by humility has not been explored. I challenge conventional thinking about the role of humility in business by proposing that narcissism, or competence, by themselves, do not provide the best value for the organization, and that it is only when humility is present that the combination benefits firm performance.

Figure 2: Conceptual Model



CEO humility and firm performance

Humility among leaders is thought to impact several outcomes such as employee morale, job engagement, organizational learning and firm performance (Saks, 2006; Rich, Lepin, Crawford, 2010; Owens & Hekman, 2012). Humility within the organization, especially within strategic leaders, impacts firm performance. Vera and Rodriguez-Lopez (2004) propose that humility is a source of competitive advantage as it is valuable, rare, irreplaceable and difficult to imitate (Barney, 1991). Organizations with strategic leaders with high levels of humility are able to capitalize on this competitive advantage for superior performance gains via four ways: their relationship with their followers, their accurate self-awareness, their teachability and their relationship with the community.

One reason that humble leaders can impact firm performance is due to their relationship with their followers. Followers respond to humble leadership behaviors, such as spotlighting others, by increasing job engagement (Owens & Hekman, 2012) and this increased job engagement increases firm performance (Rich, Lepin, Crawford, 2010; Saks, 2006). Humble leaders also are aware not only of their own strengths and weaknesses, but those of their followers, which enables them to place followers in the departments and duties which capitalize on these strengths (Owens & Hekman, 2012). The increased person-job fit results in higher work outcomes and firm performance. Humble leaders also acknowledge and appreciate the contribution of others (Owens & Hekman, 2012). When individuals know that they are will be recognized and appreciated they are motivated to perform excellently. This results in superior individual and firm performance.

Humble leaders have a low self-focus, which means that they are not the center of attention and that their devotion, attention and energies are focused on others and the larger community that they exist in (Tangney 2000). Such leaders spend a lot of time developing their followers, as their focus and motivation is on the welfare of those that they have a relationship with, are responsible for and the groups or communities that they are a part of (Nielson, et al 2010). These leaders more often work at individualized plans of development for their followers to enable their followers to be the best that they can be. Humble leaders often communicate to subordinates the value of their work in relation to larger organizational purposes and empower their employees (Ou et al, 2014). This focus on the betterment of their followers professionally and personally, as well as empowering employees would result in higher organizational commitment on the part of the followers. Followers would increase their organizational commitment as they believe that their leader and organization is genuinely invested in their well-being.

A second reason that humble leaders influence the performance of their organization is because of their willingness to see themselves accurately. Humble leaders are aware of their personal strengths and limitations, as well as the strengths, limitations, threats and opportunities of the organization (Owens & Hekman, 2012; Ou, 2011). These leaders possess effective emotional regulation (Owens & Hekman, 2012) as such they will not allow their egos, nor inaccurate perceptions of the organization's abilities to get in the way of strategic decisions unlike leaders with lower levels of humility (Vera & Rodriguez-Lopez, 2004). This enables them to make better decisions as these leaders would spend the time accurately evaluating the situation and how well does it fit them or the company.

Another reason humble leaders impact the performance of their organizations is due to their teachability and willingness to learn. Humble leaders are open to new information and ideas, willing to correct their mistakes, and eager to learn from others (Owens & Hekman, 2012; Vera & Rodriguez-Lopez, 2004). This openness to new ideas allows the leader to have a learning orientation. Leaders with learning orientations often use experiences to develop new routines and cultures to change the way the organization operates, often enabling the organization to function better than it did in the past (Wooten & James, 2008). Humble leaders promote individual learning and group learning, and are open to adopt suggestions from organizational members at any level in the organization. This creates a humble culture where mistakes are seen as a source of learning and where suggestions new ideas flow freely in the organization.

Finally another reason that humble leaders impact firm performance is because of their relationship with the community. Humble leaders often have self-transcendent pursuits, in which their life pursuits are less about them, so less focused on materialism, flashy behavior and excessive luxury, and more focused on the larger community (Ou et al, 2014). These leaders would more likely participate in community development activities such as charities and philanthropy and be motivated to provide a better place for society. Participating in such activities raises the corporate social responsibility of the organization which leads to performance gains for the organization (Orlitzky, 2003).

Hence,

H1: CEO humility is positively associated with firm performance.

The moderating role of CEO humility

As shown in Figure 1, humility can enhance other existing leader characteristics to influence organizational outcomes. In particular, I propose that humility interacts with grandiose narcissism, vulnerable narcissism and functional and cognitive competence to positively influence firm performance.

CEO humility and narcissism

Researchers agree that narcissism has its pros and cons, as Campbell et al (2010) further describe narcissism as a mixed blessing or a trade-off. The authors describe that narcissism is linked to positive and negative outcomes for the self and the social environment. They say that the outcomes are good for the narcissist but bad for those who are close to the narcissist. Like most issues, narcissism has a “dark side” and a “bright side”, the “bright side” being more aligned with productive narcissism, or the healthy dose of narcissism needed for obtaining positive outcomes while avoiding the negative outcomes. There are mixed perspectives about the relationship between narcissism and organizational outcomes in that many studies have found that narcissism is associated with better decision making and big wins (Byrne & Worthy, 2013; Chatterjee & Hambrick, 2007) while many studies have found that narcissism is associated with considerable long term costs for the organization (Resick, Whitman, Weingarden, & Hiller, 2009). This disconnect and paradoxical findings could be a result of the heterogeneity of the narcissism construct.

Recently, narcissism has been explored as having two “flavors”, grandiose narcissism and vulnerable narcissism (Campbell, Hoffman, Campbell, & Marchisio,

2010; Miller, Hoffman, Gaughan, Gentile, Maples, & Campbell, 2011). Grandiose narcissism is depicted by overt grandiosity with individuals having a sense of entitlement and preoccupation with a need for admiration; while vulnerable narcissism is depicted as a hypersensitivity to criticism and a tendency to withdraw from social interactions (Campbell, Hoffman, Campbell, & Marchisio, 2010; Miller, Hoffman, Gaughan, Gentile, Maples, & Campbell, 2011). Both flavors of narcissism encompass arrogance, self-absorption, entitlement, and volatile swings ranging from grandiosity to worthless self-esteem, (Rosenthal & Pittinsky, 2006; Chatterjee & Hambrick, 2007; Owens et al., 2013). Personality psychologists see narcissism as a dimension on which all individuals can be organized along (Gerstner, Konig, Enders, & Hambrick, 2013). As mentioned earlier, this study proposes that leaders can be situated on separate continuums of grandiose and vulnerable narcissism and humility at the same time, that is, these constructs are not exact opposites (Ou, 2011; Vera & Rodriguez-Lopez, 2004). While it is highly unlikely to find a leader that is both highly narcissistic (grandiose or vulnerable) and highly humble, there is greater variation in the moderate levels of the constructs.

CEO humility and grandiose narcissism

Typically when one thinks of a narcissist CEO, one is thinking of a grandiose narcissist who is over confident, extraverted, charming, but unwilling to take criticism, lacks true empathy and is haughty (Campbell, Hoffman, Campbell, & Marchisio, 2010). Grandiose narcissists have a sense of entitlement, a preoccupation with a need for admiration and score very high on extraversion and self-focus (Campbell, Hoffman, Campbell, & Marchisio, 2010; Miller, Hoffman, Gaughan, Gentile, Maples, & Campbell,

2011; Spangler, Gupta, Kim & Nazarian, 2012). Grandiose narcissism is further characterized by uniqueness, vanity, inflated self-view, a desire for power and esteem with relationships marked by low levels of empathy and emotional intimacy (Campbell, Hoffman, Campbell, & Marchisio, 2010). While narcissism is often viewed in a negative manner, Rosenthal and Pittinsky (2006) indicated that the vast number of narcissists in critical leadership positions indicates that there are some positive aspects to narcissism, especially as it relates to leadership. Some research has found that highly grandiose narcissistic individuals tend to be better at decision making with misleading, ambiguous information (Byrne & Worthy, 2013), and capable of achieving big wins (Chatterjee & Hambrick, 2007).

Grandiose narcissist CEOs are more comfortable making risky decisions such as large acquisitions due to their confidence and boldness (Chatterjee & Hambrick, 2011). These leaders also have more of an entrepreneurial orientation which is positively related to performance outcomes (Wales, Patel, & Lumpkin, 2013). Grandiose narcissists have high levels of confidence and optimism (Galvin et al., 2010) and their risky behavior often creates future opportunities where none existed previously (Maccoby, 2004). Grandiose narcissistic leaders tend to be more innovative and able to inspire their followers (Kjellson & van der Meer, 2012; Rosenthal & Pittinsky, 2006) creating financial gains for their organization. In times of uncertainty, individuals often seek strong leaders who will instill their followers with confidence during situations filled with difficult challenges need to be overcome (Galvin et al., 2010; Maccoby, 2004). Also, the grandiose narcissistic leader's lack of empathy is valuable when it is time to make

difficult decisions such as job cuts, factory closings and crisis negotiations (Kjellson & van der Meer, 2012; Maccoby, 2004; Rosenthal & Pittinsky, 2006).

Highly grandiose narcissistic leaders are associated with more extreme firm performance, big wins and big losses, and more fluctuation with firm performance (Chatterjee & Hambrick, 2007). They bring considerable long term costs to their firms (Resick, Whitman, Weingarden, & Hiller, 2009) and grandiose narcissist CEOs neglect to build positive organizational cultures, commitment among employees and equitable exchanges with others (Conger, 1990; Lubit, 2002). Grandiose narcissists often flaunt their capabilities and accomplishments, often to the detriment of their followers whose actions are simply forgotten or the grandiose narcissist leader takes credit for their actions and blames them for any failures (Kjellson & van der Meer, 2012; Maccoby, 2004; Rosenthal & Pittinsky, 2006). This type of behavior can lead to the alienation of followers, lower productivity and negative organizational outcomes (Lubit, 2002). These leaders continue to alienate followers as they feel and act superior to others and thus show a high degree of arrogance towards others and views that are not their own (Kjellson & van der Meer, 2012; Rosenthal & Pittinsky, 2006). If they are successful, they reject criticism and tend to stop listening to the advice of others, yet this sets them and their organization up for downfall (Maccoby, 2004).

Grandiose narcissist leaders can be unproductive when they lack a restraining mechanism and self-knowledge (Maccoby, 2004), but some degree of grandiose narcissism may be effective. Maccoby's "productive narcissist" is successful due to their risk taking and charm over their followers and in clinical psychology, narcissism related to positive self-esteem is deemed healthy versus narcissism related to entitlement thus

“productive narcissists” would be more aligned with healthy doses of narcissism that align with positive self-esteem. (Campbell, et al, 2010). The mixed perspectives about the value of grandiose narcissism suggest an inverted-U relationship so that some degree of leader grandiose narcissism would provide value to the firm, but above and beyond that point the benefits of grandiose narcissism decrease. Hence,

CEO’s humility moderates the inverted-U relationship between grandiose narcissism and performance, such that leaders with a combination of grandiose narcissism and humility will not see the positive benefits of grandiose narcissism decrease beyond a certain point, and the relationship between grandiose narcissism and firm performance will remain positive. Humility is what takes grandiose narcissism off of its spiral downwards into futility by providing the leader with the self-knowledge and awareness that comes from being humble, as well as acting as a restraining mechanism for grandiose narcissism more sinister potentials.

As Kets de Vries (1994) argued, “All people, especially leaders, need a healthy dose of narcissism...it’s the engine that drives leadership.” Similarly, Maccoby (2003) has introduced the concept of the “productive narcissism,” which is frequently associated with the success story of Steve Jobs at Apple. In my model, the “healthy dose” of narcissism emerges from the combination of humility and grandiose narcissism (See Figure 1), or the humble-grandiose narcissist.

Humble-grandiose narcissistic leaders under conditions of extremely low humility and high grandiose narcissism, allow their self-centered aims to drive their decisions, which is likely to lead to poor decisions. These leaders exploit their followers and manipulate the masses, bringing dissent and an unconstructive culture to their

organizations. These leaders allow their grandiose narcissistic tendencies to override bringing negative consequences to the firm. In contrast, when the leader combines grandiose narcissism with higher levels humility, humility's dimensions of low self-focus and accurate self-awareness hamper the humble-grandiose narcissist leaders' self-centered desires, and allow the leaders to be more balanced in their risk taking by helping them to effectively determine which risks to pursue and which to pass on. These humble-grandiose narcissist leaders may not actively seek feedback and criticism; however, they will not outrightly reject the advice of others. Humility's dimension of teachability increases the humble-grandiose narcissist leader's ability to listen to feedback and advice which would help them to make their innovations even better and avoid potentially disastrous pitfalls of their risk taking. Humility's dimension of appreciation of others helps the humble-grandiose narcissistic leader to value their followers more, take advantage of them less and even at times spotlight their followers, or at the very least stop taking credit for their achievements. This behavior builds a positive work environment and organizational gains as followers no longer have a fear of being taken advantage of, being manipulated or put down. This emotional security enables followers to be more productive and increase organizational outcomes. Hence,

H2: CEO humility positively moderates the relationship between CEO grandiose narcissism and firm performance, such that the higher the humility, the more positive and linear the relationship between grandiose narcissism and firm performance and the lower the humility, the more inverse-U relationship between CEO grandiose narcissism and firm performance.

Humility and vulnerable narcissism

Vulnerable narcissists are hypersensitive to criticism, have a tendency to withdraw from social interactions and score high on neuroticism and self-focus (Campbell, Hoffman, Campbell, & Marchisio, 2010; Miller, Hoffman, Gaughan, Gentile, Maples, & Campbell, 2011; Spangler et al, 2012). When one thinks of a narcissist that seeks psychotherapy, one is typically thinking of the vulnerable narcissist who has a hostile view of the world and believes that everyone is out to get them (Campbell, Hoffman, Campbell, & Marchisio, 2010). The vulnerable narcissist has low self esteem, but a high sense of entitlement along with high anxiety and oftentimes depression (Campbell, Hoffman, Campbell, & Marchisio, 2010). Vulnerable narcissists see the world from a self-centered perspective, with themselves as superior to others, and tend to be exploitative and lack empathy for others (Campbell, Rudich, & Sedikides, 2002; Maccoby, 2004; Rosenthal & Pittinsky, 2006).

The vulnerable narcissist leader tends to blame others for any failures (Kjellson & van der Meer, 2012; Maccoby, 2004; Rosenthal & Pittinsky, 2006), which leads to the alienation of followers and negative organizational outcomes (Lubit, 2002). These leaders continue to alienate followers as they feel and act superior to others and they have a genuine view that others are out to get them (Campbell, Hoffman, Campbell, & Marchisio, 2010; Kjellson & van der Meer, 2012; Rosenthal & Pittinsky, 2006). This hostility in their relationships with others and tendency to withdraw from social situations causes issues with the vulnerable narcissist leader (Houlcroft et al, 2012; Maccoby, 2004). For a vulnerable narcissistic leader it is more difficult to build relationships with followers as they tend to dominate and manipulate others, avoid emotional intimacy, and

are not empathic with the feelings of others which leads to feelings of alienation among followers (Houlcroft et al, 2012; Kjellson & van der Meer, 2012; Maccoby, 2004). These leaders are associated with having low communion, or friendliness and warmth (Miller et al, 2012) and are perceived by others to be more entitled and more aggressive in interpersonal relationships (Malkin et al, 2012). Followers that do not have a good relationship with their leader will have lower productivity which results in lower organizational returns.

Occasionally, the vulnerable narcissist might attempt to inhibit grandiose desires and control an underlying sense of entitlement; however, this often results in distress (Houlcroft et al, 2012). This distress can be displayed in many different ways, including counter-productive work behaviors and unethical behavior (Harms & Lebreton, 2014), which further erode firm performance. Vulnerable narcissists have strong emotional dysregulation, which results in an inability to control their emotions when upset (Campbell et al, 2010; Huprich et al, 2012). When this is combined with their over-sensitivity to the reactions of others and being easily hurt by others, it can lead them to lash out in destructive ways such as non-suicidal self-injury and various kinds of abuse (Huprich et al, 2012). Vulnerable narcissist leaders also punish those who threaten their ego, or criticize them. Research has found that they exhibit *threatened egotism* (Baumeister et al., 1996), which refers to situations when the aggressive and punitive behaviors of vulnerable narcissists are set off by a threat to ego or self-esteem.

Vulnerable narcissists punish the offender not only in retaliation, but also to prevent others from giving a similar negative evaluations and thereby protecting their self-esteem (Ng et al, 2013). This antagonistic interaction with others, especially followers, can result

in detrimental organizational outcomes.

Vulnerable narcissists are hypersensitive to criticism, unwilling to admit mistakes or listen to advice and unable to learn from experience and this rejection of criticism sets them and their organization up for downfall (Harms & Lebreton, 2014; Houlcroft et al, 2012; Maccoby, 2004). At best, such leaders simply ignore the advice given to them by well meaning followers and their companies suffer like William Smithburg, former CEO of the Quaker Oats Company, who overpaid in the purchase of Snapple leading Quaker to sell Snapple for a tremendous loss two years later (Vera & Rodriguez-Lopez, 2004). At worst, these leaders either surround themselves with “yes men and women” or their followers learn to tell the leader what they want to hear rather than the truth or what is truly important, which leads to such scandals in which the top leaders profess to “not knowing” what was going on.

H3: CEO vulnerable narcissism is negatively associated with firm performance.

CEO humility moderates the negative relationship between vulnerable narcissism and performance, such that leaders with a combination of vulnerable narcissism and humility will see the positive benefits of humility increase, and the relationship between vulnerable narcissism and firm performance will increase in the positive direction. The biggest detriment to firm performance made by the vulnerable narcissistic CEO comes from their oversensitivity to criticism of others. Humility hampers this oversensitivity such that vulnerable narcissists are better equipped to hear criticism, respond in a healthy manner to criticism and evaluate criticism.

The increased ability of the vulnerable narcissist to *hear* criticism would result decrease the instinct of followers to tell the leader what they want to hear and would

decrease the vulnerable narcissists' instinctual desire to surround themselves with those "yes men and women". The humble-vulnerable narcissist (see Figure 1) may not actively seek feedback and criticism, however when confronted with such feedback the humble-vulnerable narcissist would listen to the criticism, or at least give the appearance of listening. Humility's dimension of teachability enables the humble-vulnerable narcissist to consider the feedback as feedback instead of viewing it as criticism or negative evaluations of themselves.

As humility increases, the humble-vulnerable narcissist will increase in their ability to accurately evaluate the criticism. This will override their impulse to see the criticism as ego-threatening, the critic as hostile and themselves as unworthy. Humility's dimension of accurate self-awareness in the leader desensitizes the humble-vulnerable leader to the criticism. The leader becomes confident in their abilities, yet acknowledges their limitations and takes feedback as an attempt to better the humble-vulnerable narcissist. This allows the humble-vulnerable narcissist leader to evaluate the criticism at face value and to determine what, if any, of the criticism is valid and should be applied to the situation at hand.

The humble-vulnerable narcissist is able to hear and evaluate feedback, not as criticism of themselves or their self-worth, but as opportunities for growth. This change in perspective allows the humble-vulnerable narcissist to benefit from the advice and feedback of others to fully process and consider decisions for the betterment of the organization. Hence,

H4: CEO humility moderates the negative relationship between CEO vulnerable narcissism and firm performance, such that the higher the humility, the more positive the relationship between vulnerable narcissism and firm performance.

Humility and competence

Competence is usually attributed to an individual being experienced, capable, knowledgeable of the relevant issues, independent, well informed, efficient, or intelligent (Park & Berger, 2004). Researchers have conceptualized competence as a bundle of knowledge, skills, and behaviors (Le Deist & Winterton, 2005; Sandberg & Pinnington, 2009). This research focuses CEO competence as the possession of the skills needed to accomplish one's job tasks and the possession of relevant knowledge (Cheetham & Chivers, 1996). I also build on Pollach and Kerbler's (2011) distinction, where CEO's competence consists of the leader's company background, and educational background. Prior research has found that CEO's competence have been positively associated with firm performance (Blettner, 2012; Finkelstein & Hambrick, 1990; Rajagopalan & Datta, 1996; Wiersema & Bantel, 1992). Hence,

H5: CEO competence is positively associated with firm performance.

A competent leader is essential in business and a lack of functional and cognitive competence makes humility appear weak as Owens and Hekman found that "a leader who is humble without competence won't do well" (2001:66). In the same paper, the authors uncovered a potential contingency between humility and competence in that many leader traits, such as intelligence and competence, needed to work together with humility in order to achieve leader effectiveness. Though competence is a precondition for performance, humility can enhance that relationship. There are countless 'competent

jerks' in firms; however, the business sector is finding that these people do not work effectively in teams, nor add much value to the organization (Casciaro & Sousa-Lobo, 2005; Cuddy, Glick, & Beninger, 2011). Followers are more induced to follow humble and competent leaders and respond to such leaders by increasing job engagement (Owens & Hekman, 2012), which in turn increases firm performance (Rich, Lepin, Crawford, 2010; Saks, 2006). I also believe that these followers will have high job satisfaction by working with humble and competent leaders due to the positive interactions, development and investment made by these leaders to their followers as described previously. This positive job satisfaction would increase the likelihood of such workers participating in organizational citizenship behaviors (Organ & Ryan, 1995; Schnake, 1991) which increase the performance of the firm. Hence,

H6: CEO humility positively moderates the positive relationship between competence and firm performance, such that the higher the humility, the stronger the relationship between competence and firm performance.

Narcissism and competence

In addition to theorizing about the moderating role that CEO humility plays in the competence-performance link, I also conceptualize the moderating role played by CEO narcissism in the same competence-performance relationship. I posit that, though competence is a precondition for performance, humility enhances that relationship while narcissism erodes it. Competent yet narcissist leaders can cause harm to the organization and their followers resulting in decreased firm performance. These 'competent jerks'

often do not work effectively in teams, nor add much value to the organization (Casciaro & Sousa-Lobo, 2005; Cuddy, Glick, & Beninger, 2011).

Grandiose narcissist leaders are over confident, and unwilling to take criticism (Campbell, Hoffman, Campbell, & Marchisio, 2010). These characteristics, combined with high competence--especially in light of recent successes--, further reduce their willingness to take feedback and criticism. In fact, when these highly narcissistic CEOs experience positive performance, they see this performance as confirming their talents and superb plans, and thus they don't see need to change their behavior (Chatterjee & Hambrick, 2011). Sometimes on the heels of success, narcissist CEOs become overconfident, and have unrealistic evaluations of their strengths and limitations, as well as the strengths and limitations of the organization. This can result in very poor decisions, such as William Smithburg, former CEO of the Quaker Oats Company, who had recently experienced success with the purchase of Gatorade overestimated the firm's ability to manage Snapple and overpaid for the acquisition of the brand, which resulted in a loss of the company two years later when they had to sell Snapple (Vera & Rodriguez-Lopez, 2004). However, these CEOs contribute failures to external sources and often blame their followers for such letdowns (Chatterjee & Hambrick, 2011; Maccoby, 2004; Rosenthal & Pittinsky, 2006). Hence,

H7: CEO grandiose narcissism negatively moderates the positive relationship between competence and firm performance such that, the higher the grandiose narcissism, the weaker the relationship between competence and firm performance.

While grandiose narcissist leaders are over confident, and unwilling to take criticism (Campbell, Hoffman, Campbell, & Marchisio, 2010), vulnerable narcissist

leaders are hypersensitive to criticism, unwilling to admit mistakes or listen to advice and unable to learn from experience and this rejection of criticism sets them and their organization up for downfall (Harms & Lebreton, 2014; Houlcroft et al, 2012; Maccoby, 2004). The influence of competence on firm performance of such leaders is hampered by their hostile nature and antagonistic interpersonal behavior (Campbell, Hoffman, Campbell, & Marchisio, 2010; Houlcroft et al, 2012) as such leaders alienate followers and experience negative organizational outcomes (Lubit, 2002). Followers are not likely to follow vulnerable narcissist and competent leaders due to their hostile and aggressive interactions and respond to such leaders by decreasing job engagement (Owens & Hekman, 2012) and job performance, which in turn decreases firm performance (Rich, Lepin, Crawford, 2010; Saks, 2006). These workers will become highly dissatisfied with work and at worst, poor job satisfaction often leads to counterproductive work behaviors (Organ & Ryan, 1995; Schnake, 1991) which also negatively influence firm performance. Hence,

H8: CEO vulnerable narcissism negatively moderates the positive relationship between competence and firm performance such that, the higher the vulnerable narcissism, the weaker the relationship between competence and firm performance.

METHODS

Sample

The initial sample for this study was composed of 100 CEOs of public organizations from the list of Fortune 500 companies. This sample was part of the CEO database developed by Professor William D. Spangler, at Binghamton University. This database contains interview data and behavioral data from male CEOs of Fortune's 150 Biggest Companies for 2010 and Fortune's Best Companies for 2010 with tenures of at least five years (Spangler et al, 2012). In addition, the sample of Pilot Study 1, which focused on the development of the measure of CEO humility behaviors, was 30 CEOs (not included in Professor Spangler's database) and the sample of Pilot Study 2, which provided validation to the measure developed through Pilot Study 1, was 30 additional CEOs, this time coming from Professor Spangler's database. Considering the two pilot studies and the final study, humility data from 160 CEOs was collected.

Data was reduced for missing data and outliers. The final sample was 30 CEOs for Pilot Study 1. To increase the power of the validation studies and hypothesis testing, the samples of Pilot Study 2 and Study 3 (CEOs coming from Professor Spangler's database) were combined. This resulted in 130 CEOs for validation testing in Study 2; after the sample was reduced for missing data there were 120 CEOs for Study 2. Finally, the sample was further reduced to eliminate outliers, resulting in a final sample of 102 CEOs for Study 3 for the purpose of hypotheses testing.

Pilot Study 1

The purpose of Pilot Study 1 was to develop and validate a measure of CEO humility behaviors using unobtrusive data. No such measure is available in the current literature (See Appendix A for two recent ways in which humility has been measured using survey methods). Following a literature review, the major themes and dimensions of humility were identified as (1) appreciative view of others (AO), (2) openness to new ideas/teachability (TEACH), (3) accurate view of self (ASA), (4) low self-focus (LSF) and (5) self-transcendent pursuits (STP) (Exline & Geyer, 2004; Ou et al, 2013, Owens, 2008; Owens, Johnson, & Mitchell, 2013; Ou et al, 2014; Park & Peterson, 2001, Peterson & Seligman, 2004; Tangney, 2002; Tangney, 2000; Vera & Rodriguez-Lopez, 2004). Based on the literature review, a set of expected behaviors was developed.

To capture the unique behaviors of typically humble CEOs, the behavioral variables of two comparison groups--15 humble CEOs and 15 low humble CEOs--were explored. Table 4 shows the sample the CEOs that were included in Pilot Study 1. To maximize the contrast between the two comparison groups, CEOs were selected based on rankings for “Best Companies to Work For,” “America’s Worst Bosses,” and “Worst Companies to Work For” as well as current popular press regarding the most humble CEOs. The classification of 15 low-humility and 15 high-humility CEOs benefited from advice from and consultation with Professor William D. Spangler, who is a leadership scholar with particular expertise in the areas of charisma (House, Spangler & Woycke, 1991) effectiveness (Spangler & House, 1991), CEO narcissism, CEO Machiavellism, and CEO psychopathy (Spangler et al, 2012).

Table 4: CEOs included in Pilot Study 1

CEOs with high humility

1. Tony Hsieh, Zappos
2. Sheldon Adelson, Las Vegas Sands
3. Brian Moynihan, Bank of America
4. Pat Gelsinger, Mware
5. Omar Ishrak, Medtronic
6. Bill McDermott, SAP
7. Gary C. Kelly, Southwest Airlines
8. Jeff Weiner, LinkedIn
9. Bob McDonald, Procter & Gamble Co.
10. Warren Buffet, Berkshire Hathaway
11. Carlos Ghosn, Nissan
12. Jim Hagemann Snabe, SAP
13. Tim Cook, Apple
14. Craig Jelinik, Costco
15. Gregg Steinhafel, Target

CEOs with low humility

1. Mike Lazaridis, Research in Motion,
2. William C. Weldon, Johnson & Johnson
3. Paul Ricci, Nuance
4. Michael Jeffries, Abercrombie & Fitch
5. Chip Wilson, Lululemon
6. Aubrey McClendon, Chesapeake Energy
7. Mark Pincus, Zynga
8. Eric Schmidt, Google
9. Jim Balsillie, Research in Motion
10. Andrew Mason, Groupon
11. Eddie Lampert, Sears
12. Steve Ballmer, Microsoft
13. Reed Hastings, Netflix
14. John Chambers, Cisco
15. Donald Trump, Trump Enterprises

Source materials were obtained via non-interview sources, including Google searches of the focal CEOs, CEO profiles, and biographies. CEO interviews were not used to reduce common method bias between the humility indicators and narcissism indicators, since the source materials for CEO narcissism, included in Professor Spangler's database, were transcripts of interviews to CEOs. The CEOs in both high and low humility groups were compared and notes were made of any behavioral similarities within each group and differences between the groups. By doing this, I was able to identify additional humility behaviors in the pilot sample that were not evident from the literature review as well as eliminate expected humility behaviors that were not different between the groups. This was done to further refine the coding protocol for CEO humility behaviors.

The output of Pilot Study 1 was the indicators listed in Table 2, which corresponded to the five dimensions of humility: Accurate Self-Awareness, Appreciation of Others, Teachability, Low Self Focus and Self-Transcendent Pursuits. Each group of indicators is described in detail in the following sections.

Table 2: CEO humility behavior coding form

Humility Behaviors	Observable Behavior	Example	Coding
Accurate self awareness	Accepts blame and admits weaknesses	CEO apologizes for company performance or past mistakes	Number of incidents in letter to shareholders (ASA)
Appreciation of others	Acknowledges contributions of others	CEO spotlights the contributions of others	Number of incidents in letter to shareholders (AO)
Teachability	Educational Breadth	Number of different majors the CEO pursues	Count measure of different categories of majors (TEACH1)
	CEO advice seeking	CEO seeks advice from members at any level of organization, outside the organization or from shareholders	Number of incidents in letter to shareholders (TEACH2)
Low self focus	Financial compensation compared to (a) TMT compensation and (b) average employee compensation	CEO salary divided by top three salaries in the organization	CEO salary divided by top three salaries in the organization (LSF2)
		CEO salary divided by average employee compensation	CEO salary divided by average employee compensation (LSF3)
		CEO Total compensation divided by average employee compensation	CEO total compensation divided by average employee compensation (LSF10)
Self-transcendent pursuits	Charity boards	CEO (1) sits on (2) chairs and/or (3) founded a number of charity boards	Number of charity boards a member of, chair of and a founder of (STP)

Accurate Self-Awareness (ASA).

The dimension of Accurate Self-Awareness consisted of one indicator that captured the number of times a CEO accepted blame or indicated weakness in a document (letter to shareholders and/or news articles). This indicator aligns with the prior research (Grenberg, 2005; Owens et al, 2013; Owens, 2009; Ou et al, 2014) that states that humble individuals have a balanced view of their strengths and weaknesses which keeps them from arrogance and self-contempt. The measurement of this indicator also aligns with the humility scale from Owens et al, 2013 and is extended to the level for CEOs and collected unobtrusively.

Appreciation of Others (AO)

The dimension of Appreciation of Others included one indicator that captured if a CEO spotlighted or appreciated others in a document (letter to shareholders and/or news articles). This indicator aligns with the prior research (Morris et al, 2005; Owens et al, 2013; Ou et al, 2014; Peterson & Seligman, 2004) that states that humble individuals recognize the positive worth of others and appreciate the strengths and contributions of others. The measurement of this indicator also aligns with the humility scale from Owens et al, (2013) and is extended to the level for CEOs and collected unobtrusively.

Teachability (TEACH).

The dimension of Teachability included two indicators: (1) the educational breadth, or number of different educational majors of the CEO and (2) the number of times a CEO sought or accepted advice or feedback in a document. This indicator aligns with the prior research (Morris et al, 2005; Owens et al, 2013; Owens, 2009; Ou et al,

2013; Tangney, 2002) that states that humble individuals are eager to learn, continuously seek to improve themselves and will seek out feedback and advice in order to do so. The measurement of educational breadth indicates the willingness of a CEO to formally learn radically different things in their educational journey while the second measurement aligns with the humility scale from Owens et al, (2013) and interview coding indicators for humility from Ou et al, (2014), and is extended to the level for CEOs and collected unobtrusively.

Low Self Focus (LSF)

This dimension included three indicators: (1) CEO salary divided by the average of the top 3 salaries, (2) CEO salary divided by average employee compensation and (3) CEO total compensation divided by average employee compensation. These indicators aligns with the prior research that states that humble individuals devote most of their focus not on themselves but on others and the larger community that they exist in (Tangney 2000). . The measurement of these indicators aligns with the proxies from Chatterjee & Hambrick (2007) for narcissism, and interview coding indicators for humility from Ou et al, (2014), and is extended to the level for CEOs and collected unobtrusively.

Self Transcendent Pursuits (STP)

This indicator captured the number of charity boards a CEO is a member of, chair of, and founder of. This indicator aligns with the prior research that states humble leaders have a focus on the welfare of other, view their work in relation to larger organizational purposes and are more likely participate in community development activities to provide

a better place for society (Nielson, et al 2010; Ou et al, 2014). The measurement of this indicator aligns with interview coding indicators for humility from Ou et al, (2014), and is extended to the level for CEOs and collected unobtrusively.

Changes in CEO indicators resulting from Pilot Study 1

During Pilot Study 1, the following indicators were considered, but removed from the list of final indicators:

- CEO Salary divided by ROA to reflect upon Low Self Focus. This was removed due to its conflict with the final dependent variable of ROA.
- CEO house value divided by CEO salary. This indicator was removed because this information difficult to find and resulted in too many missing values.
- CEO usage of “personal” vs. “other” language to reflect upon Low Self Focus. This indicator showed no difference between the groups of high humble CEOs and low humble CEOs as the vast majority of CEOs use “other” language. The only exception was when CEOs were brand new to the company and were writing their first shareholder letter, or were leaving the company and writing their last shareholder letter.
- Number of TMT members with higher degrees than CEO to reflect upon Teachability: This was removed because this indicator varied according to industry norms and did not capture the situation of CEOs who dropped out from college.
- CEO personal donations to reflect upon Self-Transcendent Pursuits. This indicator was removed because this information difficult to find and resulted in too many missing values.

- CEO teachability through mission/vision statements. This indicator was removed as it was not a good indicator of CEO humility, but was more of an indicator of the company's humility culture.

During Study 1, the following indicators were considered, and added to the list of final indicators:

- Educational Breadth to reflect Teachability. This indicator examined the number of categorically different majors a CEO pursued
- CEO total compensation divided by average employee total compensation. This indicator was added to give a more accurate view of CEO compensation vs. salary and its impact as there were many CEOs that received salaries of \$1 yet were compensated in other ways.

Pilot Study 2

The purpose of Pilot Study 2 was to validate the CEO humility measure created in Study 1. Study 2 included 120 CEOs from the CEO database collected by Professor Spangler. To validate the CEO humility measure created in Pilot Study 1, I conducted several analyses of the CEO humility indicators to examine their face validity, convergent validity, and discriminant validity.

The 120 CEOs from the database were coded for personal humility behaviors via non-interview sources, such as articles, biographies and CEO profiles. They were also pre-classified as low-humility and high-humility CEOs based on recommendations from Professor Spangler. I used t-tests to explore the differences between CEOs classified as low-humility and high-humility, and PLS software to explore the relationships between

CEO humility and the following behavioral measures already included in the CEO database: (a) modesty, (b) extravagant behavior, and (c) number of trophy wives. I expected a negative relationship between the CEO humility behaviors and number of trophy wives, a positive relationship with CEO modesty behaviors, and a negative relationship with CEO extravagant behavior.

Study 3 sample

Study 3 included 102 CEOs from the CEO database collected by Professor Spangler. This sample was reduced from the 120 CEOs in Study 2, to 102 CEOs by removing outliers for each of the variables in question. This database contains interview data and behavioral data from male CEOs of Fortune's 150 Biggest Companies 2010 and Fortune's Best Companies 2010 with tenures of at least five years.

Measures

As mentioned earlier, Table 2 shows the behaviors that were captured to measure CEO humility behaviors. These indicators were combined to create a humility index for hypothesis testing purposes. In addition, Table 5 includes all the remaining independent variables, dependent variable, and control variables with their measures and sources.

Table 5: Summary of Final Variables and Operationalizations

VARIABLE	DESCRIPTION	OPERATIONALIZATION	SOURCE
Independent variables			
<i>CEO Humility</i>	Behaviors indicative of CEO humility	Please see Table 2 for details	CEO profiles Compustat Shareholder letters
<i>CEO Grandiose and Vulnerable Narcissism</i> (Spangler et al, 2012)	Grandiose and vulnerable narcissism scores	Scores obtained through language from CEO interviews	Professor Spangler's database
<i>CEO Competence</i> (Beal & Yasai-Ardekani,2000; Pollach & Kerbler, 2011)	Proxies indicative of CEO competence	<ul style="list-style-type: none"> - Highest degree level - Prestige of university that granted the latest degree - Number of years with company - Number of years as CEO - Total number of years CEO was in prior TMT positions 	Compustat, BoardEx CEO profiles
Dependent variable			
<i>Firm performance</i>		Return on Assets (ROA) over four years	Compustat
Controls			
<i>Industry</i>		dummy coding manufacturing or service	CompuStat

CEO grandiose and vulnerable narcissism

I used the grandiose and vulnerable narcissism measures developed by Professor Spangler and the narcissism scores included in his CEO database (Spangler et al, 2012). Spangler et al. (2012) collected three types of live interviews to develop the narcissism scores: verbatim transcripts of TV interviews, verbatim transcripts of conference calls that CEOs and other top management officers of public companies periodically have with stock analysts and interviews conducted for publication in print media such as the Wall Street Journal. The interviews range from 1995-2010, used only the direct speech of the CEO and were found using Factiva. The database contains approximately ten documents or approximate equal numbers of each type per CEO for a total of 232 documents. Narcissism was measured using computerized language analysis of the interviews and elements of personal behavior (Spangler et al, 2012) and was measured using the personality variables of self-focus, extraversion, and neuroticism such that grandiose narcissism was an interaction of self-focus and extraversion and vulnerable narcissism was an interaction of self-focus and neuroticism.

CEO competence

Competence was measured and collected using content analysis of CEO profiles on their company websites to determine competence. Competence was be evaluated by looking at the CEO education and tenure (Beal & Yasai-Ardekani, 2000; Pollach & Kerbler, 2011).

Dependent variables

Corporate financial performance (CFP) was measured by return on assets (ROA) from the financial databases. This variable was chosen as it is one of the most common indicators of profitability (Miller & Lee, 2001). The rate of return on assets (ROA) measures the company's ability to generate profit from its assets. I used lagged data and averaged four years of performance data.

Control Variables

Prior studies have found that the size of the firm and industry is related to its financial performance. To account for such influences the study controlled for firm size, measured by number of employees. To normalize the data, the number of employees was transformed by the logarithm function. Industry was measured by a dummy variable of manufacturing industry. Finally, consistent with prior work researching the impact of CEOs on firm performance, I controlled for the structural power of the CEO, measured by the duality of the CEO/chairperson position, CEO/president position and CEO/COO position as well as the age of the CEO. To increase the power of the study, I performed hypothesis testing using the industry variable only as this was the only control variable that was significant during initial regression testing.

Statistical Analysis

I used hierarchical linear regression analysis to test the hypothesis. Variables were standardized because they were measured using different scales. To increase the

statistical power of regression, only those control variables that showed significance in the first model were included in the final analyses.

Because in Professor Spangler's database grandiose narcissism is conceptualized as the multiplication of self-focus and extraversion, and vulnerable narcissism is conceptualized as the multiplication of self-focus and neuroticism, my moderating hypotheses can be viewed as actual 3-way interactions, instead of 2-way interactions. To test the 3-way interactions in hypothesis 2 (humility x self-focus x extraversion), hypothesis 4 (humility x self-focus x neuroticism), hypothesis 7 (competence x self-focus x extraversion) and hypothesis 8 (competence x self-focus x neuroticism), the 2-way interactions of humility x self-focus (hypothesis 2 and 4), humility x extraversion (hypothesis 2), humility x neuroticism (hypothesis 4), competence x self-focus (hypothesis 7 and 8), competence x extraversion (hypothesis 7), competence x neuroticism (hypothesis 8) were also included in the regressions. Significance was determined using one-tailed tests as theory predicted the direction of the results.

Post-hoc analyses were performed to explore how the humility indicators and the humility dimensions related to performance individually. As part of the post-hoc, I repeated the validation analysis in Partial Least Squares (PLS), a causal modeling approach developed by Wold (1985), this time examining each humility indicator and dimension individually. (For a good introduction to PLS, see Barclay, Higgins, and Thompson, 1995.) PLS is a very powerful multivariate analysis technique that is ideal for testing structural models with latent variables. Like covariance structure analysis (CSA), PLS allows the researcher to analyze simultaneously all paths between constructs, and the relationships between constructs and their indicators. However, CSA and PLS

have different objectives. CSA is concerned with fitting covariance matrices and requires that both the measurement and structural models have strong theoretical grounding, that the data be multivariate normal, and that sample sizes be relatively large. In contrast, PLS is concerned with prediction in the traditional regression sense by minimizing residual variances and maximizing R^2 . It is ideal in the early stages of theory building and testing. As Lohmoller (1989: 213) summarizes, CSA is “closer to the model, more confirmatory and more model analytic,” while PLS is “closer to the data, more exploratory, and more data analytic.” Because of its relatively unrestrictive assumptions--sample size does not need to be large and the assumptions of normality and interval-scaled data are not necessary--PLS was considered the best for the purpose of the post-hoc analysis.

RESULTS

Descriptive Statistics

Table 6 represents the descriptive statistics and correlations of the variables used in the validation model. Humility was significantly negatively correlated with extravagant behavior, positively correlated with modesty and negatively correlated with the number of trophy wives, which is consistent with our expectations between the CEO behaviors. As expected, humility was also significantly negatively correlated with psychopathy and vulnerable narcissism and negatively correlated with grandiose narcissism. Vulnerable narcissism, grandiose narcissism and psychopathy were all significantly positively correlated with each other.

Table 6: Correlations of Validation Model

Variables	N	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1 humility	120	.00	1.00	1						
2 extravagant behavior	120	.00	1.00	-.377*	1					
3 modesty	120	.00	1.00	.116	-.097	1				
4 trophy wives	120	.00	1.00	-.112	.504*	0.167†	1			
5 self focus*dominance (pyschopathy)	120	.62	1.72	-.232*	.431*	.082	.608*	1		
6 self focus*extraversion (grandiose narcissism)	120	.43	1.61	-.140	.414*	.074	.583*	.665*	1	
7 self focus*neuroticism (vulnerable narcissism)	120	.67	2.05	-.314*	.489*	.018	.615*	.810*	.753*	1

Note: * = $p < 0.05$ † = $p < 0.1$

Table 7 represents the descriptive statistics and correlations of the variables used in the performance model. Humility was not significantly correlated with grandiose narcissism or vulnerable narcissism, which is consistent with the idea that humility is not the opposite of narcissism, that humility and narcissism are independent facets that could co-exist to some degree. As expected, vulnerable narcissism was significantly positively correlated with grandiose narcissism. The competence index, composed of all competence dimensions, was significantly negatively correlated with age, which suggests that as CEOs age, their competence decreases. Grandiose narcissism was found to be significantly positively correlated with age, suggesting that as CEOs age they become more narcissist, of the grandiose type. The interplay of age, competence and narcissism is fertile ground for future research, as it could suggest that older CEOs become more narcissistic as they cover for their decreasing competence.

Table 7: Correlations of Performance Model

Variables	N	Mean ^c	SD ^c	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1 Age	126	62.05	7.37	1.00											
2 BOD Chair	125	0.86	0.35	0.25*	1.00										
3 COO	126	0.16	0.37	0.04	0.18	1.00									
4 Manu	126	0.36	0.48	0.02	-0.02	-0.05	1.00								
5 Employees ^a	126	11.06	1.53	0.15	0.01	0.03	0.05	1.00							
6 President	126	0.64	0.48	-0.18*	-0.15	0.34*	-0.15	-0.01	1.00						
7 AO	124	6.15	5.85	-0.03	-0.06	-0.08	0.15	0.25*	-0.08	1.00					
8 ASA	121	4.45	3.82	-0.02	-0.02	0.02	0.05	0.17	-0.04	0.42*	1.00				
9 LSF2	125	2.05	1.84	0.20*	0.02	-0.15	0.03	0.06	-0.01	-0.09	-0.10	1.00			
10 LSF3	120	24.17	30.87	0.22*	0.08	0.01	-0.07	0.18	0.03	-0.05	0.06	0.66*	1.00		
11 LSF10	119	248.29	235.75	0.09	0.13	0.09	-0.08	0.20*	0.09	0.01	0.00	0.02	0.18	1.00	
12 STP	113	3.40	5.22	0.01	0.10	0.20*	0.01	0.07	-0.03	0.55*	0.27*	0.00	0.07	0.20*	1.00
13 TEACH1	126	1.21	0.52	-0.05	-0.02	-0.02	-0.02	0.05	0.06	-0.11	-0.04	-0.02	-0.05	-0.07	-0.07
14 TEACH2	123	0.92	1.49	-0.08	-0.01	0.00	-0.10	0.05	-0.01	-0.15	0.00	0.10	0.01	0.00	-0.04
15 CEO Tenure	125	11.22	7.03	0.19*	0.08	-0.10	-0.22*	-0.10	0.02	-0.13	-0.04	0.00	0.02	0.04	-0.15
16 Prior TMT	123	6.91	9.12	0.13	0.04	0.17	0.00	-0.09	-0.06	-0.14	-0.02	0.00	0.05	-0.08	0.00
17 Tenure	121	25.26	12.85	0.28*	0.10	0.06	0.00	0.20*	-0.06	0.00	0.07	0.08	0.06	0.03	0.05
18 Highest Degree	126	1.69	0.77	0.18*	0.14	-0.15	0.10	-0.08	-0.15	-0.14	-0.03	0.13	0.04	-0.06	-0.04
19 Univ Prestige	106	4.19	0.71	0.15	0.06	-0.04	0.02	-0.10	-0.14	-0.05	-0.09	-0.14	-0.12	0.02	-0.05
20 Grandiose Narcissism ^b	120	.06	1.13	0.21*	0.05	0.08	0.04	-0.02	-0.09	0.01	0.05	-0.08	0.20*	0.10	0.18
21 Vulnerable Narcissism ^b	120	.13	1.06	0.17	0.01	-0.10	0.07	0.03	-0.09	0.05	0.12	0.04	0.30*	-0.15	0.04
22 Competence Index ^b	120	-.01	.51	-0.35*	0.18	-0.03	-0.05	-0.06	-0.15	-0.18	-0.05	0.07	0.07	-0.03	-0.10
23 Humility Index ^b	120	.00	.39	-0.15	-0.04	0.07	0.00	0.04	0.00	0.49*	0.51*	-0.46*	-0.41*	-0.32*	0.38*

Note: * = p< 0.05 ^a natural logged ^b index using standardized variables ^c non standardized variables / correlations based on standardized variables

Table 7: Correlations (cont)

Variables	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
1 Age											
2 BOD Chair											
3 COO											
4 Manu											
5 Employees ^a											
6 President											
7 AO											
8 ASA											
9 LSF2											
10 LSF3											
11 LSF10											
12 STP											
13 TEACH1	1.00										
14 TEACH2	0.09	1.00									
15 CEO Tenure	-0.11	-0.11	1.00								
16 Prior TMT	-0.13	-0.18	0.04	1.00							
17 Tenure	-0.20*	-0.03	0.34*	0.03	1.00						
18 Highest Degree	0.36*	0.27*	-0.09	-0.08	-0.14	1.00					
19 Univ Prestige	0.07	-0.12	0.14	0.12	0.17	0.19	1.00				
20 Grandiose Narcissism ^b	0.08	-0.01	0.06	0.07	0.01	0.06	0.18	1.00			
21 Vulnerable Narcissism ^b	-0.03	0.04	0.02	0.10	-0.06	0.06	0.02	0.66*	1.00		
22 Competence Index ^b	0.01	-0.06	0.58*	0.44*	0.56*	0.36*	0.64*	0.13	0.05	1.00	
23 Humility Index ^b	0.27*	0.16	-0.04	-0.01	-0.06	0.03	0.05	0.06	0.00	-0.02	1.00

Note: * = p< 0.05 ^a natural logged ^b index of standardized variables ^c non standardized variables all correlation variables are standardized

Validation Testing

To increase the statistical power of the validation analysis, the CEOs gathered for Study 2 and Study 3 were combined and grouped into high humility and low humility groups to assist validation. The CEOs were independently categorized by Professor Spangler, acting as an outside expert on leadership. CEOs were grouped into the high humility group using information from the Fortune Best CEOs, Machiavellianism studies, and personal CEO information. The low humility group included famous narcissists, Machiavellians and psychopaths into this group. This grouping was used to run t-tests for validation purposes (Table 8) for the control variables, humility indicators and humility index.

Table 8: T-Tests of Variables

<i>Controls</i>	Low Humility			High Humility			t-test
	N	Mean	Std. Dev	N	Mean	Std. Dev	
Age	90	63.23	5.91	30	60.27	7.97	-2.17*
BOD Chair ^{ac}	89	0.90	0.30	30	0.77	0.43	-1.56
COO ^c	90	0.17	0.37	30	0.17	0.38	0.00
Manu ^a	90	0.39	0.49	30	0.27	0.45	-1.26
Employees ^a	90	435412.04	2785486.67	30	268667.33	1062702.47	-0.32
President ^{ac}	90	0.61	0.49	30	0.70	0.47	0.89
<i>Humility Indicators</i>							
AO	88	5.80	5.24	30	6.67	4.50	0.82
ASA	85	4.14	3.36	30	4.83	4.16	0.91
LSF2	89	2.09	1.40	30	2.17	2.84	0.21
LSF3	86	24.09	19.17	28	27.08	54.40	0.44
LSF10 ^a	84	293.43	257.09	29	147.59	116.08	-4.12*
STP ^a	81	3.95	5.97	27	1.96	1.97	-2.60*
TEACH1	90	1.23	0.52	30	1.20	0.48	-0.31
TEACH2	87	0.83	1.20	30	1.07	1.76	0.83
<i>Humility Index^b</i>	90	-0.05	0.35	30	0.13	0.48	1.91 [†]

Note: [†]=p<0.1 * =p<0.05 ^a=unequal variances ^b=standardized ^c=dichotomous

Significance levels are determined using a one-tailed test, since theory predicts the direction of the effects.

The only significant difference between the two groups in control variables was age, in which more humble CEOs were typically younger than less humble CEOs. The humility index was significantly different between the two groups with the more humble group receiving higher humility scores than the less humble group. This provides some degree of validation for my humility index and the humility groupings.

To further validate the humility index and indicators, I created a structural equation model with PLS of the standardized variables (see Figure 3 for path model). This model allowed me to examine the discriminant and convergent validity between the humility index and the CEO behaviors of modesty, extravagant behavior and number of trophy wives. Path coefficients are showed in Table 9.

Figure 3: PLS Model of humility and modesty, extravagant behavior and number of trophy wives

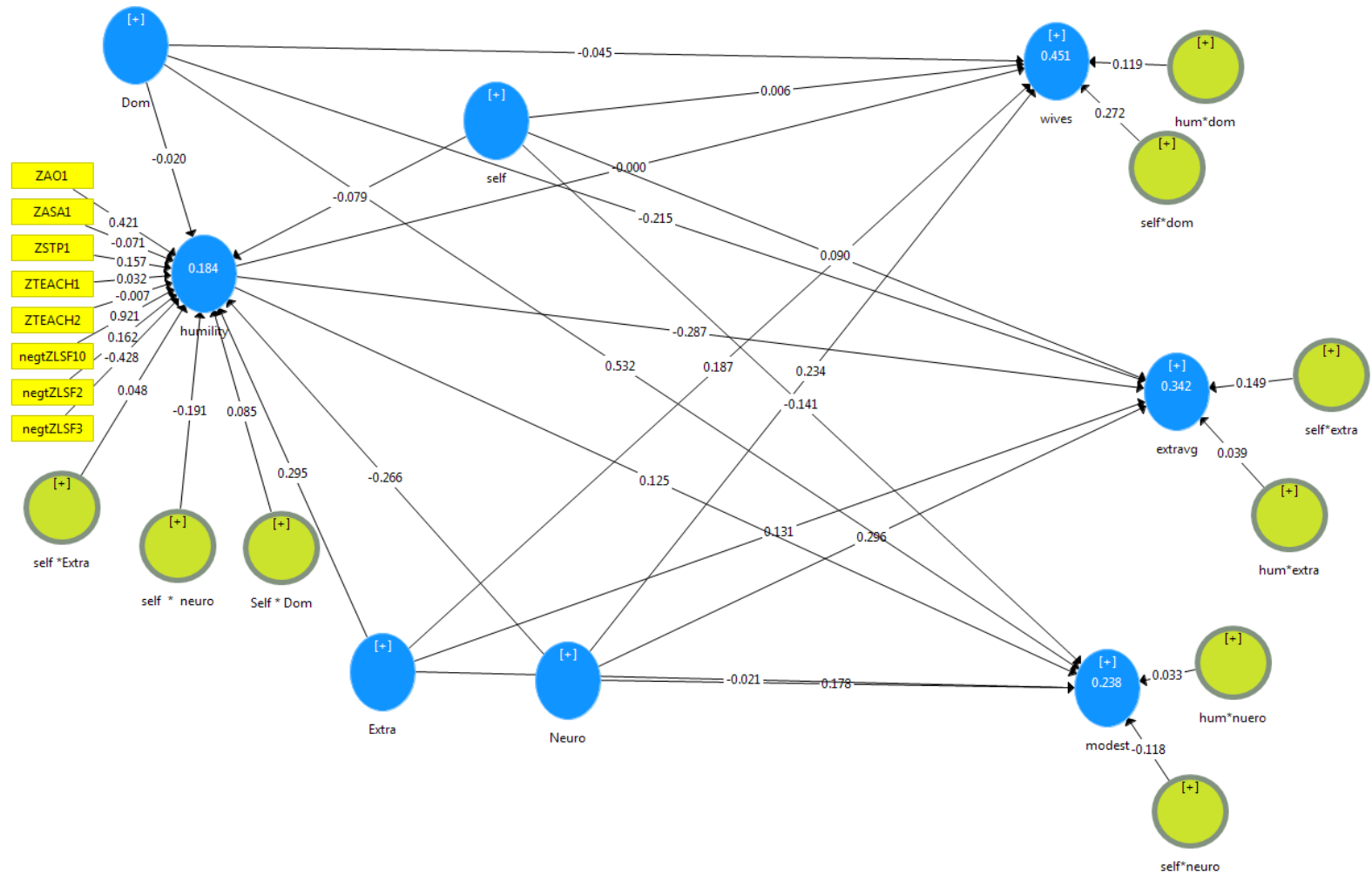


Table 9: Summary Results from Partial Least Squares Analyses of standardized humility indicators and CEO behaviors

	Extravagant behavior	Modesty	Trophy wives	Humility
Humility	-0.287 [†]	0.125	0	
Humility x extraversion	0.039			
Self focus x extraversion (Grandiose Narcissism)	0.149 [†]			0.048
Humility x dominance			0.119	
Self focus x dominance (Psychopathy)			0.272*	0.085
Self focus x neuroticism (Vulnerable Narcissism)		-0.118		-0.191
Humility x neuroticism		0.033		

Note: values of t were calculated through bootstrapping with 500 resamples
significance levels were calculated using a one-tailed test since theory predicted the direction of the effects
N=124, †= p<0.1 , * = p < .05

As shown in Table 9, the relationship between the humility index and the CEO behaviors was in the expected directions. The humility index had a marginally significant negative relationship with extravagant behavior, a non-significant relationship with modesty (coefficient in the positive direction) and a non-significant zero relationship with the number of trophy wives. This model is suggestive of additional validation of the humility indicators and measures. Additionally, grandiose narcissism had the expected directions of marginally significant positive relationship with extravagant behavior, vulnerable narcissism had a non-significant relationship with modesty (coefficient in the expected negative direction), and psychopathy had the expected significant positive relationship with the number of trophy wives. I also examined the path coefficients of grandiose narcissism, vulnerable narcissism and psychopathy onto humility to test if any of those variables predicted humility. The non-significant results show that neither grandiose narcissism nor psychopathy predicted humility while vulnerable narcissism had a non-significant relationship with humility with a coefficient in the negative direction.

In conclusion, the unobtrusive CEO humility measure was significantly different between the two groups of CEOs that were independently categorized, which gives some validation to the measure. Additionally, although the statistical power of my validation tests is low, the results suggest a negative relationship between CEO humility and CEO extravagant behavior and a positive relationship between CEO humility and CEO modesty, which provides some degree of discriminant and convergent validity. Also, correlations and path coefficients suggest that humility was characteristically different from vulnerable narcissism, grandiose narcissism and psychopathy.

Hypothesis Testing

To test the model in Figure 2, I used hierarchical linear regression analysis. Table 10 shows the hierarchical multiple regression analyses that tested humility as a moderator of grandiose narcissism on firm performance. To test the inverse-U relationship of the contingency effect, I added square terms of grandiose narcissism (an interaction of self-focus and extraversion) to the model. The control variable for industry (MANU) is significant and positive for all models. There is no support for humility's direct effect on firm performance (hypothesis 1) in this model. There is marginal support for the linear relationship of humility as a moderator of the relationship between grandiose narcissism and performance (hypothesis 2), there is no support for the inverted-U relationship of humility as a moderator grandiose narcissism and performance (hypothesis 2, shown by the interaction of the square terms of grandiose narcissism (an interaction of self-focus and extraversion) in model 5). The plot for this interaction is shown in Figure 4.

Figure 2: Conceptual Model

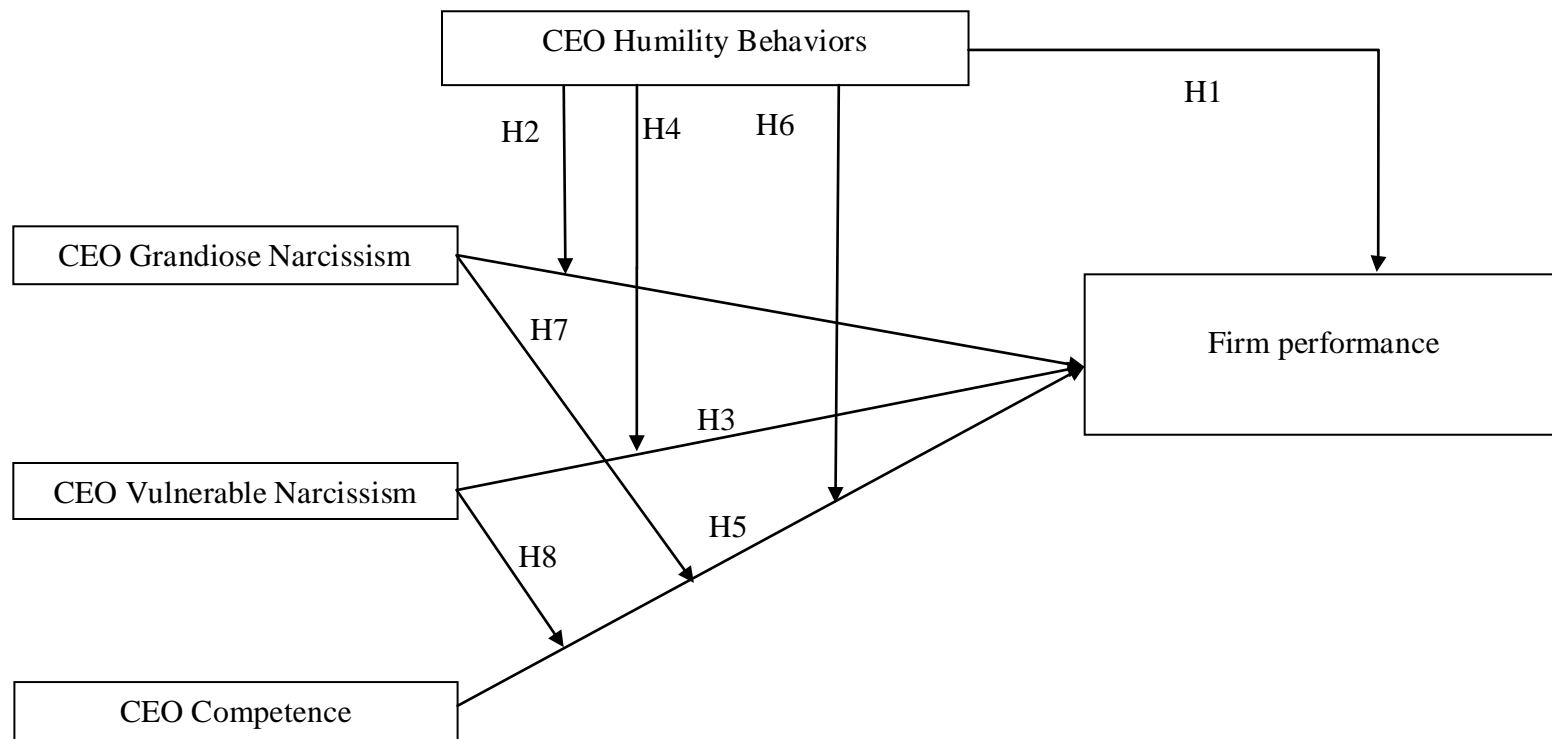


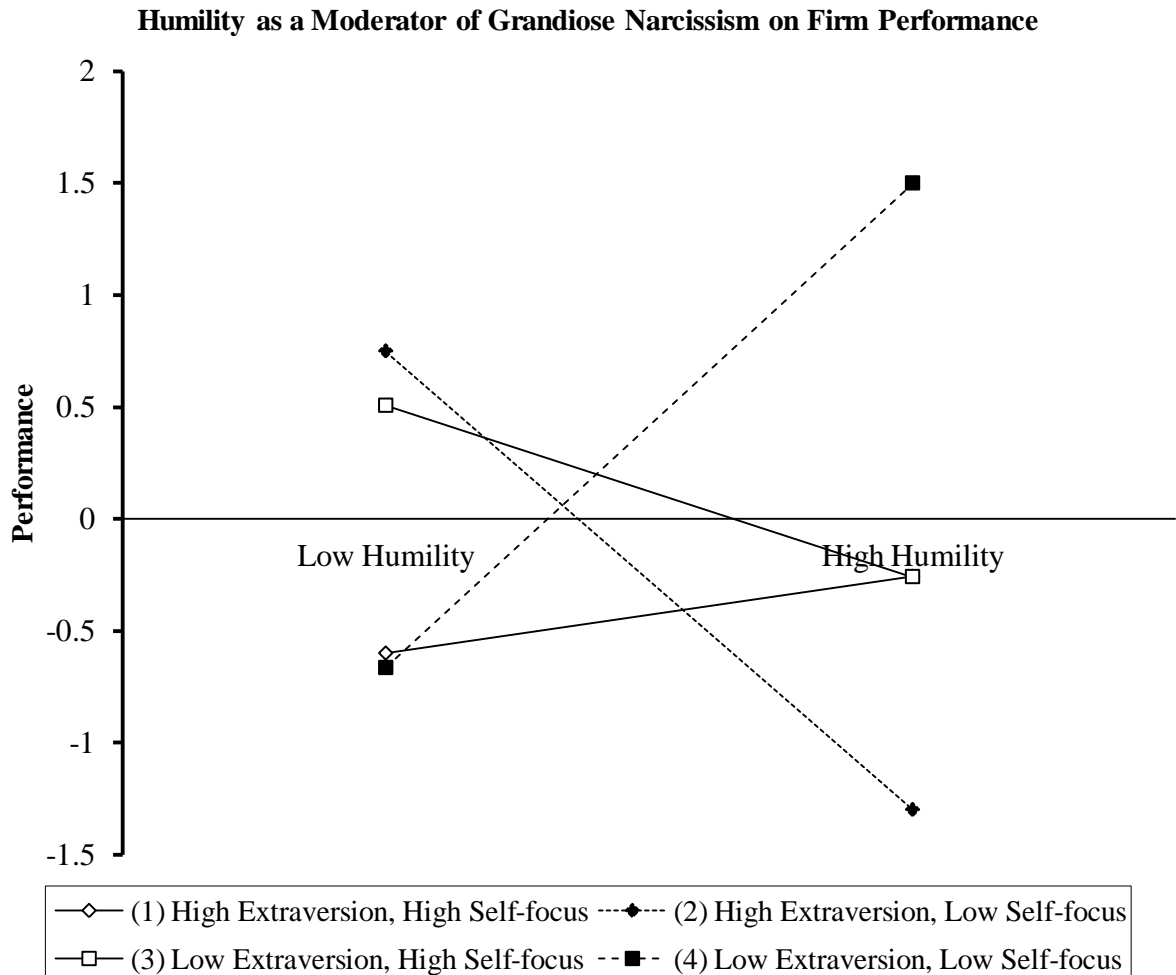
Table 10: Hierarchical Multiple Regression Analyses Testing Humility as a Moderator of Grandiose Narcissism on Firm Performance

Variable	Model 1		Model 2		Model 3		Model 4		Model 5	
	B	(SE)	B	(SE)	B	(SE)	B	(SE)	B	(SE)
(Constant)	0.02	(0.08)	-0.01	(0.07)	-0.03	(0.07)	-0.04	(0.07)	-0.05	(0.07)
Manu	0.22*	(0.08)	0.16*	(0.07)	0.15*	(0.07)	0.17*	(0.07)	0.11†	(0.07)
H1 Humility index			0.04	(0.17)	-0.06	(0.18)	-0.02	(0.18)	-0.10	(0.20)
Extraversion			-0.39*	(0.07)	-0.40*	(0.09)	-0.41*	(0.09)	-0.50*	(0.07)
Self Focus			-0.22*	(0.12)	-0.21*	(0.12)	-0.22*	(0.12)	-0.12	(0.10)
Self Focus x Extraversion (GN)					0.05	(0.25)	0.09	(0.26)	0.01	(0.10)
Humility x Self Focus					-0.15	(0.33)	-0.06	(0.33)	-0.23	(0.31)
Humility x Extraversion					-0.43*	(0.19)	-0.27	(0.22)	-0.59*	(0.20)
H2 Humility x Self Focus x Extraversion (GN)							0.86†	(0.61)	0.12	(0.24)
Self Focus x Extraversion (GN) squared									0.03	(0.04)
H2 Humility x Self Focus x Extraversion (GN) squared									0.08	(0.09)
ΔR^2	0.07*		0.23*		0.03		0.01		0.03	
R^2	0.07*		0.30*		0.34*		0.35*		0.38*	

Note: N=102 †=p<0.1 *=p< 0.05

Significance levels are determined using a one-tailed test, since theory predicts the direction of the effects.

Figure 4: Interaction plot of humility and grandiose narcissism



This result also gives support to the proposition that CEO humility and CEO narcissism can co-exist and are not opposite extremes on the same spectrum.

Table 11 shows the hierarchical multiple regression analyses that tested humility as a moderator of vulnerable narcissism on firm performance. The control variable for industry (MANU) is significant and positive for all models. There is marginal support for humility’s direct effect on firm performance (hypothesis 1) in Model 2, however the effects disappear when the moderators and three way interaction is added. There is no

support for vulnerable narcissism's direct effect on firm performance (hypothesis 3) in this model and no support for humility as a moderator of the relationship between vulnerable narcissism and firm performance (hypothesis 4).

Table 11: Hierarchical Multiple Regression Analyses Testing Humility as a Moderator of Vulnerable Narcissism on Firm Performance

Variable	Model 1		Model 2		Model 3		Model 4	
	B	(SE)	B	(SE)	B	(SE)	B	(SE)
(Constant)	0.02	(0.08)	-0.03	(0.07)	-0.04	(0.08)	-0.05	(0.08)
Manu	0.22*	(0.08)	0.18*	(0.07)	0.19*	(0.07)	0.18*	(0.07)
H1 Humility index			0.23 [†]	(0.18)	-0.09	(0.13)	0.16	(0.21)
Neuroticism			-0.33*	(0.08)	-0.28*	(0.09)	-0.27*	(0.10)
Self Focus			-0.09	(0.13)	-0.09	(0.13)	-0.12	(0.14)
H3 Self Focus x Neuroticism (Vulnerable Narcissism)					0.21	(0.23)	0.22	(0.23)
Humility x Self Focus					-0.15	(0.37)	-0.22	(0.39)
Humility x Neuroticism					-0.25*	(0.17)	-0.15	(0.23)
H4 Humility x Self Focus x Neuroticism (Vulnerable Narcissism)							0.40	(0.59)
ΔR^2	0.07*		0.16*		0.03		0.00	
R^2	0.07*		0.23*		0.26*		0.26*	

Note: N=102 [†]=p<0.1 * =p< 0.05 Significance levels are determined using a one-tailed test, since theory predicts the direction of the effects.

Table 12 shows the hierarchical multiple regression analyses that tested humility as a moderator of competence on firm performance. The control variable for industry (MANU) is significant and positive for all models. There is no support for humility's direct effect on firm performance (hypothesis 1), no support for competence's direct effect on firm performance (hypothesis 5) and no support for humility as a moderator of competence (hypothesis 6) in this model.

Table 12: Hierarchical Multiple Regression Analyses Testing Humility as a Moderator of Competence on Firm Performance

Variable	Model 1		Model 2		Model 3	
	B	(SE)	B	(SE)	B	(SE)
(Constant)	0.00	(0.08)	0.00	(0.08)	0.00	(0.08)
Manu	0.17*	(0.08)	0.17*	(0.08)	0.17*	(0.08)
H1 Humility index			0.15	(0.21)	0.16	(0.21)
H5 Competence index			-0.06	(0.16)	-0.08	(0.17)
H6 Humility x Competence					-0.13	(0.43)
ΔR^2	0.04*		0.01		0.00	
R^2	0.04*		0.04		0.04	

Note: N=102 †=p<0.1 *=p< 0.05 Significance levels are determined using a one-tailed test, since theory predicts the direction of the effects.

Table 13 shows the hierarchical multiple regression analyses that tested grandiose narcissism as a moderator of competence on firm performance. The control variable for industry (MANU) is significant and positive for all models. There is no support for competence's direct effect on firm performance (hypothesis 5) in this model. There is no support for grandiose narcissism as a moderator of competence (hypothesis 7).

Table 13: Hierarchical Multiple Regression Analyses Testing Grandiose Narcissism as a Moderator of Competence on Firm Performance

Variable	Model 1		Model 2		Model 3		Model 4	
	B	(SE)	B	(SE)	B	(SE)	B	(SE)
(Constant)	0.02	(0.08)	-0.02	(0.07)	-0.02	(0.07)	-0.02	(0.07)
Manu	0.22*	(0.08)	0.16*	(0.07)	0.15*	(0.07)	0.15*	(0.07)
H5 Competence index			-0.08	(0.13)	-0.14	(0.15)	-0.14	(0.16)
Extraversion			-0.39*	(0.07)	-0.36*	(0.09)	-0.35*	(0.09)
Self Focus			-0.22*	(0.12)	-0.30*	(0.13)	-0.31*	(0.14)
Self Focus x Extraversion (Grandiose Narcissism)					0.14	(0.26)	0.16	(0.26)
Competence x Self Focus					-0.25	(0.34)	-0.24	(0.34)
Competence x Extraversion					0.46*	(0.17)	0.53*	(0.24)
H7 Competence x Self Focus x Extraversion (Grandiose Narcissism)							0.28	(0.70)
ΔR^2	0.07*		0.23*		0.06*		0.00	
R^2	0.07*		0.30*		0.36*		0.36*	

Note: N=102 †=p<0.1 *=p< 0.05 Significance levels are determined using a one-tailed test, since theory predicts the direction of the effects.

Table 14 shows the hierarchical multiple regression analyses that tested vulnerable narcissism as a moderator of competence on firm performance. The control variable for industry (MANU) is significant and positive for all models. There is no support for vulnerable narcissism's negative direct effect on firm performance (hypothesis 3) in Model 3; however the coefficients are significant, but in the opposite direction as theorized. There is no support for competence's direct effect on firm performance (hypothesis 5) in this model and there is no support for vulnerable narcissism as a moderator of competence (hypothesis 8).

Table 14: Hierarchical Multiple Regression Analyses Testing Vulnerable Narcissism as a Moderator of Competence on Firm Performance

Variable	Model 1		Model 2		Model 3		Model 4	
	B	(SE)	B	(SE)	B	(SE)	B	(SE)
(Constant)	0.02	(0.08)	-0.03	(0.07)	-0.06	(0.08)	-0.06	(0.08)
Manu	0.22*	(0.08)	0.18*	(0.07)	0.19*	(0.07)	0.19*	(0.07)
H5 Competence index			-0.13	(0.14)	-0.19	(0.16)	-0.18	(0.17)
Neuroticism			-0.33*	(0.08)	-0.27*	(0.09)	-0.28*	(0.09)
Self Focus			-0.09	(0.13)	-0.19*	(0.15)	-0.18	(0.15)
H3 Self Focus x Neuroticism (Vulnerable Narcissism)					0.30*	(0.22)	0.29	(0.23)
Competence x Self Focus					-0.52*	(0.38)	-0.51*	(0.38)
Competence x Neuroticism					0.26*	(0.16)	0.23	(0.19)
H8 Competence x Self Focus x Neuroticism (Vulnerable Narcissism)							-0.12	(0.52)
ΔR^2	0.07*		0.15*		0.04*		0.00	
R^2	0.07*		0.22*		0.26*		0.26*	

Note: N=102 †=p<0.1 *=p< 0.05

Significance levels are determined using a one-tailed test, since theory predicts the direction of the effects.

Summarizing, hypothesis 1 was tested three times in separate models and there was marginal support in model 2 of the regression model testing humility as a moderator of vulnerable narcissism on firm performance (Table 11). However, this effect disappears once moderators are added to the model, hence partial support for hypothesis 1. Hypothesis 2 is supported due to marginally significant coefficients; and hypothesis 3 is not supported even though there is a significant relationship between vulnerable narcissism and performance, however, this relationship is in the opposite direction.

Post-Hoc Analysis

Due to the low predictability of the humility index, I wanted to know how the humility indicators behaved as well as how did the humility dimensions behave in relation to performance. As a post hoc analysis, I repeated the validation analysis in PLS this time examining each individual humility indicator. Each indicator was tested to determine if it had a negative relationship with extravagant behavior, and negative or zero relationship with trophy wives and a positive relationship with modesty.

Table 15
Post Hoc Summary Results from Partial Least Squares Analyses
Path coefficients of humility indicators and CEO behaviors

	Extravagant	Modesty	Trophy Wives
AO	-0.233*	0.056	0.094
ASA	0	0.117	0.019
STP	-0.028	-0.142	-0.056
TEACH1	0.008	-0.089	-0.073
TEACH2	-0.003	0.022	-0.036
negtLSF2 ^a	0.127	-0.116	-0.042
negtLSF3 ^a	0.056	-0.109	-0.212
negtLSF10 ^a	-0.169†	0.149	-0.034

Note: ^a=standardized and multiplied by -1 for ease in interpretation
values of t were calculated through bootstrapping with 500 resamples
significance levels were calculated using a one-tailed test since theory
predicts the direction of the effects
N=124, †= p<0.1 , *= p < .05

The results (Table 15) show Appreciation of Others (AO) was significantly negative with extravagant behavior and positive for modesty and trophy wives. CEO total compensation divided by average employee compensation (LSF10) was marginally significantly negative with extravagant behavior, positive with modesty and negative for trophy wives. The remaining indicators were compared with the requirements of having a negative relationship with extravagant behavior, negative or zero relationship with trophy wives and a positive relationship with modesty and found that accurate self awareness (ASA) passed 1 out of 3; self transcendent pursuits (STP) passed 2 out of 3; educational breadth (TEACH 1) passed 1 out of 3; CEO advice seeking (TEACH2) passed 3 out of 3; CEO salary divided by top 3 employees (LSF2) passed 1 out of 3; and CEO salary divided by average employee compensation (LSF3) passed 1 out of 3. From the post hoc validation study it was suggested that the best indicators were CEO advice

seeking (TEACH2), Appreciation of Others (AO), CEO total compensation divided by average employee compensation (LSF10), and self transcendent pursuits (STP).

As a post hoc analysis, I tested the performance model using PLS. PLS was used due to its ability to perform superior with smaller samples and non-normal data as compared to regression. The sample was not reduced due to outliers; however it was reduced for missing data to produce a final sample of 124 CEOs. The performance model was tested dimensionally to see the impact of each humility dimension on performance as well as indicator by indicator and using combinations of the best indicators as determined by the post hoc validation test. Each moderator was tested in a separate model and moderating hypotheses were calculated using one-tailed tests since theory predicted a direction. The values of t were calculated through bootstrapping with 500 resamples. The results for the significant findings are found in Table 16 through Table 20.

Table 16
Post Hoc Summary Results from Partial Least Squares Analyses
Using STP Humility Indicators

Hypothesis	Path from -> To	Theoretical Model	
		Path coefficient	(t) ^{ab}
	Extra -> performance	-0.52	(1.50)
	GN -> performance	-0.06	(0.60)
2	STP*GN -> performance	-0.22	(1.12)
	STP *extra -> performance	0.20	(1.01)
	STP *self -> performance	0.04	(0.27)
1	STP -> performance	0.28*	(2.20)
	self -> performance	-0.06	(0.64)

Note: ^a values of t were calculated through bootstrapping with 500 resamples

^b moderating hypotheses were calculated using a one-tailed test

N=124, †= p<.1 , *= p < .05

Significant results were found for hypothesis 1 (Table 16) when using the self-transcendent pursuits (STP) dimension of humility only.

Table 17
Post Hoc Summary Results from Partial Least Squares Analyses
Using ASA Humility Indicators

Hypothesis	Path from -> To	Theoretical Model	
		Path coefficient	(t) ^{ab}
	Extra -> performance	-0.56	(1.50)
	GN -> performance	0.15	(1.36)
2	ASA *GN -> performance	0.20†	(1.50)
	ASA *extra -> performance	-0.19	(0.95)
	ASA *self -> performance	-0.18	(1.46)
1	ASA -> performance	-0.02	(0.18)
	self -> performance	-0.20	(1.51)

Note: ^a values of t were calculated through bootstrapping with 500 resamples

^b moderating hypotheses were calculated using a one-tailed test

N=124, † = p<0.1 , * = p < .05

Marginally significant results were found for hypothesis 2 (Table 17) when using the accurate self awareness (ASA) dimension of humility only.

Table 18
Post Hoc Summary Results from Partial Least Squares Analyses
Using ASA Humility Indicators

Hypothesis	Path from -> To	Theoretical Model	
		Path coefficient	(t) ^{ab}
	Neuroticism -> performance	-0.41	(2.34)
3	VN -> performance	0.11	(1.18)
4	ASA *VN -> performance	0.29†	(1.55)
	ASA *neuroticism -> performance	-0.02	(0.12)
	ASA *self -> performance	-0.14	(1.02)
1	ASA -> performance	0.02	(0.22)
	self -> performance	-0.17	(1.05)

Note: ^a values of t were calculated through bootstrapping with 500 resamples

^b moderating hypotheses were calculated using a one-tailed test

N=124, † = p<0.1 , * = p < .05

Marginally significant results were found for hypothesis 4 (Table 18) when using the accurate self awareness (ASA) dimension of humility only.

To test the hypotheses that involved competence (hypotheses 5-8), using PLS and according to the indicator loadings onto the latent variables, I separated competence into three latent variables. Educational Competence (Compt_EDU) consisting of the prestige of the university and the highest level of degree received; Experience Competence (Compt_EXP) consisting of the tenure as CEO and the number of years spent in prior TMT positions which tapped into the task specific knowledge and finally Tenure, consisting of the CEO's tenure with the company which tapped into the firm specific knowledge.

Table 19
Post Hoc Summary Results from Partial Least Squares Analyses
Using STP Humility Indicators

Hypothesis	Path from -> To	Theoretical Model	
		Path coefficient	(t) ^{ab}
5	Tenure -> performance	0.18†	(1.81)
6	STP *Tenure -> performance	0.10	(0.76)
1	STP -> performance	0.12	(1.10)
	manu -> performance	0.19†	(1.90)

Note: ^a values of t were calculated through bootstrapping with 500 resamples
^b moderating hypotheses were calculated using a one-tailed test
N=124, † = p<0.1 , * = p < .05

Significant results were found for hypothesis 5 (Table 19) when testing all dimensions of humility separately for Tenure (except for the Teachability dimension), grandiose narcissism and vulnerable narcissism as a moderator of the relationship between competence (in this case, tenure) and performance, (I have only showed the table for the STP dimension due to space considerations, Table 19). When testing hypothesis 5 using the Experience Competence latent variable, there were no significant results when testing all the moderators.

Table 20
Post Hoc Summary Results from Partial Least Squares Analyses
Using ALL Humility Indicators

Hypothesis	Path from -> To	Theoretical Model	
		Path coefficient	(t) ^{ab}
5	Competence_EDU -> performance humility*competence_EDU ->	-0.23*	(3.06)
6	performance	-0.10	(0.70)
1	humility -> performance	-0.19	(0.70)
	manu -> performance	0.18*	(2.05)

Note: ^a values of t were calculated through bootstrapping with 500 resamples
^b moderating hypotheses were calculated using a one-tailed test
N=124, † = p<0.1 , * = p < .05

However when testing the hypothesis with Educational Competence, the results were significant in the opposite direction for all dimensions of humility, grandiose narcissism and vulnerable narcissism as a moderator of the relationship (I have only showed the table for all dimensions of humility due to space considerations, Table 20). More research is needed to discover why educational competence has a negative impact on firm performance as opposed to a positive impact as theorized.

Overall, the results of the post hoc hypothesis testing (Table 25) lend to partial support of hypothesis 1 found in STP dimension; partial support of hypothesis 2 found in ASA dimension; partial support of hypothesis 4 found in ASA dimension and partial support of hypothesis 5 found for Tenure only while the significant coefficients of educational competence were in the opposite direction.

To examine how the dimensions theoretically hypothesized for competence and humility compared to statistical tests, a post-hoc factor analysis was ran on the competence and humility indicators.

Table 21: Post Hoc Rotated Factor Matrix for the Competence Variables

Original Dimension	Competence Variables	Factors		
		1	2	3
Tenure	Tenure	.800	.058	.113
Experience Competence	CEO Tenure	.819	-.059	-.146
Educational Competence	Highest Degree	-.292	.768	-.276
Educational Competence	Univ Prestige	.331	.736	.279
Experience Competence	Prior TMT	-.048	-.014	.943

Note: Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Following the hypothesis testing in PLS, a factor analysis was ran on the competence indicators (Table 21) which also resulted in three factors, however the indicators were factored differently than the theoretical dimensions. The Tenure and CEO Tenure indicators were factored together, while Years in Prior TMT Positions was factored alone. The indicators for Educational Competence remained the same. These factors will be tested in PLS as a future study.

Table 22: Post Hoc Rotated Factor Matrix for the Standardized Humility Variables

Original Dimension	Humility Variables	Factors		
		1	2	3
Low Self Focus	LSF2	.737	-.126	.314
Low Self Focus	LSF3	.846	.092	.048
Low Self Focus	LSF10	.749	.099	-.201
Accurate Self Awareness	ASA	-.063	.782	.143
Appreciation of Others	AO	.012	.859	.027
Self Transcendent Pursuits	STP	.238	.617	-.338
Teachability	TEACH1	-.014	-.155	.626
Teachability	TEACH2	.115	.300	.711

Note: Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.

I ran a factor analysis on the humility indicators (see Table 22) using the extraction method of principal component analysis with varimax rotation, to explore the structure of the humility index. This resulted in three factors, which was a reduction from the original proposed five dimensions of humility. The Low Self Focus dimension and the Teachability dimension remained intact, while the Accurate Self Awareness, Appreciation of Others and Self-Transcendent Pursuits dimensions were collapsed into one dimension. These factors will be tested in PLS as a future study.

DISCUSSION

The purpose of the dissertation was to extend management theory by answering three research questions: (1) How does CEO humility impact firm performance? (2) How does CEO humility relate to CEO grandiose and vulnerable narcissism, and CEO competence? (3) What are the effects of CEO grandiose and vulnerable narcissism and CEO competence on firm performance, in the presence and in the absence of CEO humility? In the previous chapters, I argued that humility is a critical strength for leaders who possess it and a weakness for leaders who lack it. This dissertation explored if CEO humility, CEO competence, CEO vulnerable narcissism and CEO grandiose narcissism could co-exist and what impact does a combination of these traits make on firm performance. Instead of a “more is better” view of humility, and any CEO trait, this dissertation strove to provide a more contingent view of humility to advance a more realistic view of the complexities of top leaders.

On the theory side, I sought to refine the construct of humility and to conceptualize it at the CEO level by taking a current look at the field of positive organizational scholarship and the growing literature on humility in management, and by integrating the findings into a more comprehensive yet defined construct. In particular, this dissertation sought to examine the unique construct of CEO humility, or humility of top management team members, expanding the previous view of humility at lower levels of management. On the empirical side, this dissertation strove to develop and validate an unobtrusive measure of CEO humility which was lacking in the literature. Since top leaders are not entirely free to fully expose their characters and traits as they serve as figureheads of the company, they are very strategic in what they reveal. As such, many of

the current measures for humility, such as Owen's (2013) expressed humility scale, not only would be difficult to obtain in a survey, but would not accurately reflect the constraints in which CEOs operate. Not only did I strive to present an omnibus measure of CEO humility composed on several dimensions, but I also sought to present a more nuanced measure of CEO humility that took into account the complexities and variations among the dimensions of humility.

In the previous chapters, I have described the multi-step process I followed, using several samples, to create and validate an archival measure of CEO humility. I also showed the results of statistical analyses performed to assess the relationships between CEO humility on firm performance, the role CEO humility plays on the relationship between narcissism, competence and performance, and the role of narcissism on the relationship between competence and performance. In this section, I will discuss the findings in detail, and then proceed to describe insights and implications for theory and practice. In the final sections of this dissertation I will also explore the limitations and areas for future research before offering final conclusions.

Summary of Findings: Measure Development

Table 23 summarizes the results of the validation of the humility index. The t-test between the group of high humility CEOs and the low humility CEOs was significant across the humility index. The structural equation model between the humility index and the CEO behaviors of modesty, extravagant behavior and number of trophy wives was marginally significant between humility and extravagant behavior, but not significant for the remaining focal variables, however the direction of path coefficients is suggestive of

discriminant and convergent validity because of a positive association between humility and modesty, and a negative or nonexistent association between humility and number of trophy wives. The non-significant path coefficients of grandiose narcissism, vulnerable narcissism and psychopathy onto humility suggest that neither grandiose narcissism nor psychopathy predicted humility while vulnerable narcissism had a non-significant negative relationship with humility.

Table 23: Summary of Measure Validation

Validation of Humility Index	Comments
Face validity	Significant differences of humility index between high and low humility groups
Discriminant and convergent validity	Marginally significant negative path coefficient between humility and extravagant behavior. Although not significant, the direction of the remaining path coefficients is suggestive of discriminant and convergent validity because of a positive association between humility and modesty, and a negative or nonexistent association between humility and number of trophy wives.

In order to test the model of CEO humility’s impact on firm performance, a measure of CEO humility was needed. Since such a measure for CEO humility does not exist part of the dissertation was devoted to creating and validating an unobtrusive measure of CEO humility. As discussed previously, data about CEO humility and CEO competence was collected through unobtrusive methods using shareholder letters and news articles as sources, while data about CEO narcissism was collected through unobtrusive methods using interview videos and transcripts of interviews as sources. I acknowledge that it is ideal to collect information about personality characteristics

through either direct observations or survey methods, however due to the difficulty accessing the population of strategic leaders, unobtrusive measures are used. A set of eight indicators measuring the five dimensions of CEO humility was developed (Table 2). The independently categorized high humility group of CEOs had significantly higher scores of the humility index than the independently categorized low humility group of CEOs. The humility index had a positive relationship with CEO modesty and negative relationship with CEO extravagant behavior and no relationship with the number of trophy wives. In addition, the humility index was characteristically different than vulnerable narcissism, grandiose narcissism and psychopathy.

This validated measure of CEO humility is the foundation for future researchers who desire to study humility at the strategic level yet need unobtrusive measures. This is the first measure of its kind in the field and I encourage other researchers to use this measure as it offers a multidimensional view of CEO humility that can be measured unobtrusively.

Summary of Findings: Hypotheses Testing

Table 24 summarizes the results of the hypotheses testing using the humility index. Hypothesis 1 was tested three times in separate models and there was marginal support in model 2 of the regression model testing humility as a moderator of vulnerable narcissism on firm performance (Table 11). However, this effect disappears once moderators are added to the model, hence partial support for hypothesis 1. Hypothesis 2 is partially supported due to significant coefficients for the linear relationship between humility as a moderator of the relationship between grandiose narcissism and

performance, however there was no support for the inverse-U relationship between humility as a moderator on the relationship between grandiose narcissism and performance; and hypothesis 3 is not supported even though there is a significant relationship between vulnerable narcissism and performance, however, this relationship is in the opposite direction. I expect more support with a larger sample in the cases where the coefficient is in the hypothesized direction (hypothesis 4).

Table 24: Summary of Findings

Hypotheses	Comments
Hypothesis 1: CEO humility is positively associated with firm performance	Partial support. Supported in the humility as a moderator of vulnerable narcissism on firm performance model. Not supported in the grandiose narcissism nor competence models
Hypothesis 2: CEO humility positively moderates the relationship between CEO grandiose narcissism and firm performance, such that the higher the humility, the more positive and linear the relationship between grandiose narcissism and firm performance and the lower the humility, the more inverse-U relationship between CEO grandiose narcissism and firm performance.	Partial Support. Significant support for the linear relationship, no support for the inverse-U relationship.
Hypothesis 3: CEO vulnerable narcissism is negatively associated with firm performance.	No support. Significant relationship between vulnerable narcissism and performance, however, in the opposite direction.
Hypothesis 4: CEO humility moderates the negative relationship between CEO vulnerable narcissism and firm performance, such that the higher the humility, the more positive the relationship between vulnerable narcissism and firm performance.	No support. Although not significant, coefficients are in the direction as theorized.
Hypothesis 5: CEO competence is positively associated with firm performance	No support. Non significant coefficients were in the opposite direction as theorized.

Table 24: Summary of Findings (cont'd)

Hypotheses	Comments
Hypothesis 6: CEO humility positively moderates the positive relationship between competence and firm performance, such that the higher the humility, the stronger the relationship between competence and firm performance.	No support. Non significant coefficients were in the opposite direction as theorized.
Hypothesis 7: CEO grandiose narcissism negatively moderates the positive relationship between competence and firm performance such that, the higher the grandiose narcissism, the weaker the relationship between competence and firm performance.	No support. Non significant coefficients were in the opposite direction as theorized.
Hypothesis 8: CEO vulnerable narcissism negatively moderates the positive relationship between competence and firm performance such that, the higher the vulnerable narcissism, the weaker the relationship between competence and firm performance.	No support. Non significant coefficients were in the opposite direction as theorized.

Interpretation of Findings

In the following sections, I discuss the results in greater detail and also address possible explanations for non-findings.

Hypothesis 1-Direct effect between CEO Humility and Firm Performance

During the validation studies, a statistical test of differences showed significant difference between the group of high humility CEOs and low humility CEOs when compared with performance, such that the group of high humility CEOs had significantly higher firm performance than the group of low humility CEOs. When the hypothesis that higher levels of humility lead to increased levels of firm performance was tested with regression analysis, the hypothesis was partially supported. In the model testing humility as a moderator of the relationship between vulnerable narcissism and firm performance, the hypothesis was supported. In the models testing humility as a moderator of the relationship between (a) grandiose narcissism and (b) competence with firm performance, the results were not significant.

Considering the results from the test of differences and the partial support of this hypothesis, I conclude that the lack of full support for the hypothesis is due to the lack of power, not the lack of a relationship. Statistical power represents “the probability of rejecting the null hypothesis when it is false and some specific alternative hypothesis is true” (Lindsay, 1993: 211). The effect size, the significance level, and the sample size influence power (Cohen, 1977). In this study effect size is very difficult to determine, since there is little previous quantitative empirical work on humility published.

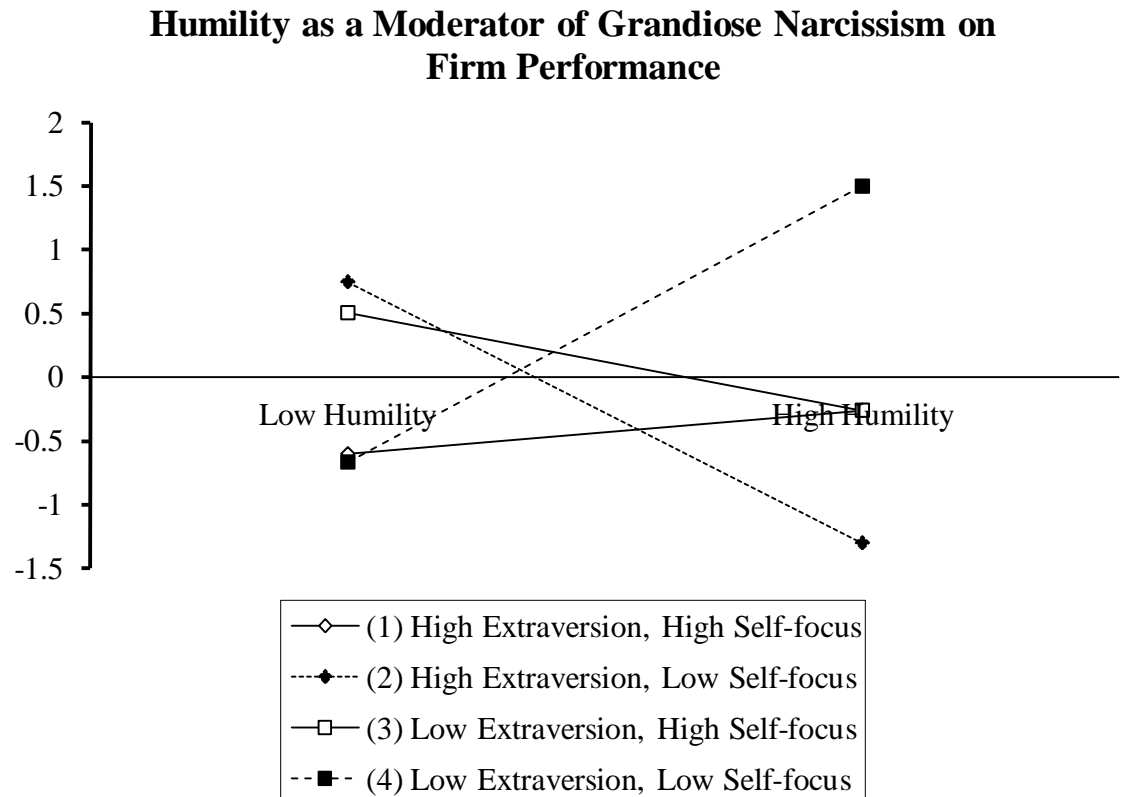
Addressing the research question of “How does CEO humility impact firm performance?,” my results suggest that CEO humility positively impacts firm performance. Not only do CEOs with higher levels of humility benefit from higher levels of firm performance, but CEOs who lack high levels of humility are at a disadvantage. Companies would be prudent to ensure that their CEOs have high levels of humility to ensure firm success.

Hypothesis 2-Moderating Role of Humility on the link between Grandiose Narcissism and performance

When the hypothesis that CEO humility positively moderates the relationship between CEO grandiose narcissism and firm performance was tested with regression analysis, the hypothesis was supported. These results helped to answer the research question of “What are the effects of CEO grandiose narcissism on firm performance, in the presence and in the absence of CEO humility?” My study showed that in the absence of CEO humility, CEO grandiose narcissism had zero effect on firm performance due to non-significance. However in the presence of CEO humility, CEO grandiose narcissism had a significant and large positive effect on firm performance.

The graph of the interactions (Figure 4) shows the marginally significant relationship of the interaction of grandiose narcissism and humility. High levels of humility have a positive marginally significant impact on grandiose narcissism’s relationship with performance. There is no support for the inverse U relationship hypothesized between grandiose narcissism and performance in cases of low levels of humility.

Figure 4: Interaction plot of humility and grandiose narcissism



Grandiose narcissistic CEOs will be able to enjoy greater gains in firm performance if they also have higher levels of CEO humility. This result also gives support to the proposition that CEO humility and CEO narcissism can co-exist and are not opposite extremes on the same spectrum. This contributes to both established research in narcissism and the fledging research in humility and advances the concept that CEO traits such as humility and narcissism are best viewed through a more holistic and contingent view that exposes the complexities of CEOs.

Hypothesis 3-Direct effect between Vulnerable Narcissism and Firm Performance

When the hypothesis that CEO vulnerable narcissism is negatively associated with firm performance was tested with regression analysis, the hypothesis was partially supported. In the regression model testing humility as a moderator of the relationship between vulnerable narcissism and firm performance, the direct effect of vulnerable narcissism on performance was not supported, in fact, the non significant coefficients of vulnerable narcissism on firm performance were positive. In the regression model testing competence as a moderator of the relationship between vulnerable narcissism with firm performance, the coefficients of vulnerable narcissism on firm performance were significant and positive. However, the hypothesis was not supported as the coefficients were in the opposite direction as theorized. This was surprising given the previous literature on the negative effects of vulnerable narcissism (Houlcroft et al, 2012; Kjellson & van der Meer, 2012; Maccoby, 2004).

More research is needed to determine why vulnerable narcissism had the opposite impact as expected especially considering the significance of those results. One consideration is that the vulnerable narcissist's ability to make decisions with misleading, ambiguous information (Byrne & Worthy, 2013) overpowers the impact on firm performance from their hypersensitivity to criticism, and unwillingness to admit mistakes or listen to advice (Harms & Lebreton, 2014; Houlcroft et al, 2012; Maccoby, 2004). Another consideration is that the vulnerable narcissist's negative impact on firm performance is similar to the proverb, 'the straw that broke the camel's back' in that the vulnerable narcissist has a small but cumulative effect that is not evident over smaller spans of firm performance, but is more apparent over longer time spans.

Hypothesis 4-Moderating Role of Humility on the link between Vulnerable Narcissism and firm performance

When the hypothesis that CEO humility moderates the relationship between CEO vulnerable narcissism and firm performance was tested with regression analysis, the hypothesis was not supported. This result helps to address the research question of “What are the effects of CEO grandiose narcissism on firm performance, in the presence and in the absence of CEO humility?” My study showed that in the absence of CEO humility, CEO vulnerable narcissism had positive non-significant coefficients with firm performance. However in the presence of CEO humility, CEO vulnerable narcissism had larger positive non-significant coefficients on firm performance. The results were not significant however the coefficients of the triple interaction were larger than the coefficients of the direct effects which is the direction that was theorized.

However future research with larger sample sizes with greater variance of vulnerable narcissism is needed to address concerns about lack of statistical power in my study. Another consideration for the non-findings is that the measure of vulnerable narcissism used in this study was an interaction of two personality traits: self-focus and neuroticism. Perhaps measuring vulnerable narcissism using other methods such as the 10-item Hyper-sensitive Narcissism Scale (Hendin & Cheek, 1997) or the 52-item Pathological Narcissism Inventory (Pincus, Ansell, Pimentel, Cain, Wright, & Levy, 2009), would give stronger results without the need for a triple interaction.

Hypothesis 5-Relationship between Competence and Firm Performance

When the hypothesis that CEO competence is positively associated with firm performance was tested with regression analysis, the hypothesis was not supported. In addition to the lack of significance, the coefficients were in the opposite direction as theorized. This was surprising; however I believe that this is due to CEO competence being a multi-dimensional construct with some of the indicators being more powerful than others and driving the results. In the section on post-hoc analyses, I report my examination of the differential effects of individual competence dimensions.

Hypothesis 6- Moderating Role of Humility on the link between Competence and firm performance

When the hypothesis that CEO humility positively moderates the relationship between CEO competence and firm performance was tested with regression analysis, the hypothesis was not supported. The results were not significant. In addition to the lack of significance, the coefficients were in the opposite direction as theorized. Like the results from the direct effects hypothesis of CEO competence on firm performance, I believe that this is due to CEO competence being a multi-dimensional construct with the indicators counteracting each other. In the section on post-hoc analyses, I report my examination of the differential effects of individual competence dimensions. Additionally, the phenomena may be explained by the incorrect view of humility being a weakness. If others, especially stockholders, view humility as a weakness and hence a humble CEO as a weak CEO, they might then believe that the CEO is also incompetent.

Hypothesis 7- Moderating Role of Grandiose Narcissism on the link between Competence and firm performance

When the hypothesis that CEO grandiose narcissism negatively moderates the relationship between CEO competence and firm performance was tested with regression analysis, the hypothesis was not supported. The results were not significant and the coefficients were in the opposite direction as theorized. Like the results from the direct effects hypothesis of CEO competence on firm performance,, I believe that this is due to CEO competence being a multi-dimensional construct with the indicators counteracting each other. In the section on post-hoc analyses, I report my examination of the differential effects of individual competence dimensions.

Hypothesis 8- Moderating Role of Vulnerable Narcissism on the link between Competence and firm performance

When the hypothesis that CEO vulnerable narcissism negatively moderates the relationship between CEO competence and firm performance was tested with regression analysis, the hypothesis was not supported. The results were not significant and the coefficients were in the opposite direction as theorized. Like the results from the direct effects hypothesis for CEO competence on firm performance, I believe that this is due to CEO competence being a multi-dimensional construct with the indicators counteracting each other which was tested in a post hoc study.

Post-Hoc Analyses

To further understand the underlying structure of CEO humility, the dimensions of CEO humility were tested for validation. A set of eight indicators measuring the five dimensions of CEO humility was developed (Table 2). The independently categorized high humility group of CEOs significantly differed in their CEO total compensation divided by average employee compensation (LSF10), and self transcendent pursuits (STP) indicators compared to the independently categorized low humility group of CEOs. From the post hoc validation study the indicators of CEO advice seeking (TEACH2), Appreciation of Others (AO), CEO total compensation divided by average employee compensation (LSF10), and self transcendent pursuits (STP) were found to be discriminately valid from CEO extravagant behavior and number of trophy wives and convergently valid with CEO modesty.

The post hoc study showed that the multidimensional nature of CEO humility should not be neglected in future research. The dimensions of CEO humility are complex and have a multifaceted relationship with outcome variables as some dimensions have larger effects while other dimensions have negative effects. The impact of these dimensions of humility might counteract each other depending on the outcome variable and result in low predictability power. A possibility is that CEO humility, like narcissism, isn't just one flavor, but in addition to being multidimensional, there actually exists multiple types of CEO humility. This would explain the counteracting effects of the dimensions of humility on firm performance. The confounding interactions of the dimensions of CEO humility should be explored in future research.

Using PLS, CEO competence was split into three latent variables (a) education competence (b) experience competence and (c) tenure. Each type of CEO competence had its own unique relationship with the outcome variables and interactions with humility and narcissism. The post hoc analysis gives support to my earlier proposition that there are multiple types of CEO competence which echoes Cheetham and Chivers (1996) more comprehensive framework of competence which consists of functional competence (possessing the skills to accomplish the tasks of one's job), personal competence (adopting appropriate behavior), cognitive competence (possessing relevant knowledge), and ethical competence (possessing appropriate personal and professional values). Based on this framework, my indicators for CEO competence would be related to functional competence (experience competence and tenure) and cognitive competence (educational competence); however the factor analysis split the indicators into three factors. Future research is needed to reconcile the two frameworks of competence. Future research is also needed to explain why educational competence would have a negative relationship on the outcome variables. This implies that a CEO's educational background, instead of being an advantage, is actually a hindrance to firm performance. More research is needed to understand this phenomenon.

Table 25: Summary of Post Hoc Quantitative Results

Hypotheses	Comments
Hypothesis 1: CEO humility is positively associated with firm performance	Partial support. Support found in STP dimension
Hypothesis 2: CEO humility positively moderates the relationship between CEO grandiose narcissism and firm performance, such that the higher the humility, the more positive and linear the relationship between grandiose narcissism and firm performance and the lower the humility, the more inverse-U relationship between CEO grandiose narcissism and firm performance.	Partial support. Support found in ASA dimension
Hypothesis 3: CEO vulnerable narcissism is negatively associated with firm performance.	No support. Path coefficients in opposite direction
Hypothesis 4: CEO humility moderates the negative relationship between CEO vulnerable narcissism and firm performance, such that the higher the humility, the more positive the relationship between vulnerable narcissism and firm performance.	Partial support. Support found in ASA dimension
Hypothesis 5: CEO (a) education competence (b) experience competence and (c) tenure is positively associated with firm performance	Partial support. Support found for Tenure only. Educational competence in opposite direction.
Hypothesis 6: CEO humility positively moderates the positive relationship between (a) education competence (b) experience competence and (c) tenure and firm performance, such that the higher the humility, the stronger the relationship between (a) education competence (b) experience competence and (c) tenure and firm performance.	No support.
Hypothesis 7: CEO grandiose narcissism negatively moderates the positive relationship between (a) education competence (b) experience competence and (c) tenure and firm performance such that, the higher the grandiose narcissism, the weaker the relationship between (a) education competence (b) experience competence and (c) tenure and firm performance.	No support.

Table 25: Summary of Post Hoc Quantitative Results (cont'd)

Hypotheses	Comments
Hypothesis 8: CEO vulnerable narcissism negatively moderates the positive relationship between (a) education competence (b) experience competence and (c) tenure and firm performance such that, the higher the vulnerable narcissism, the weaker the relationship between (a) education competence (b) experience competence and (c) tenure and firm performance.	No support.

Overall there was partial support for hypotheses 1, 2, 4, and 5 with at least one dimension of humility. This provides support to my earlier proposition that CEO humility might come in different “flavors” or types consisting of a combination of the dimensions since some dimensions appear to counteract the effects of each other on the outcome variable. More research is needed to develop these different types of CEO humility and provide valid measures for the types. This study provides a great foundation for an omnibus humility measure while giving direction to future studies of various subtypes of humility.

Limitations of the Study

The largest limitation of the study was a lack of power to sufficiently test the underlying relationships. There was evidence for the underlying relationships due to partial support of some hypotheses and the coefficients going in the right direction for other hypotheses, yet there wasn't enough power to statistically test the complexity of the relationships. This lack of power was due to the combination of three reasons: sample size, type of relationships tested and use of proxies.

The final sample was reduced from 130 CEOs to 102 CEOs after outliers and missing data was removed. The performance model was also tested including all outliers and replacing missing data with the mean on a sample size of 120 CEOs. No substantial differences were found when this was done. The sample size of the CEOs was limited due to the number of CEOs in the outside database from which the narcissism data was collected. A future study examining the theoretical model without the narcissism variables is planned and will have a larger sample size. This future study is detailed in the future research section. The performance model tested several moderating relationships and a few three-way interactions as well. Such detection of interaction effects requires additional considerable statistical power, and power is a function of sample size, which combined with my low sample size, meant that my study had a lack of power. Finally, there was a lack of power due to the unobtrusive nature of the measure and use of proxies as opposed to directly surveying the CEOs. While survey measures would be ideal, the difficulty of obtaining survey results for the population I am interested in determined the use of unobtrusive measures. This is true is most research at the strategic level considering the generous 10% completion rate of surveys is much less for this population. Proxy measures, especially proxy measures of personality characteristics have diminished power in tapping into the constructs of interest. While empirically valid, proxy measures offer less conceptual clarity than more explicit measures of underlying psychological characteristics (Finkelstein, 1992; Priem, Lyon, & Dess, 1999). Another limitation of using proxy measures is that most of the dimensions of humility were measured using one indicator. Additional valid indicators of the dimensions of CEO humility are needed for a more robust measure of CEO humility.

While the predictability of CEO humility on firm performance was low, there was evidence that such a relationship exists due to partial support of some hypotheses and the coefficients going in the right direction for other hypotheses. It is possible that the lack of proximity of the outcome variable of firm performance to the CEO trait of humility had an effect on the predictability. Smaller samples, like the one in this study, make it difficult to find direct relationships between independent variables and more distal dependent variables (Shrout & Bolger, 2002). Future studies could look at mediating factors and more proximal outcome variables of CEO humility such as company culture, organizational learning, perceived organizational support and employee attraction and retention. These factors all individually have impact on firm performance which could explain the small predictability of CEO humility on firm performance.

The study was also limited in that the sample consisted of only male CEOs. There is evidence that there are significant differences between men and women's usage of the related construct of servant leadership style, in that female leaders were more likely to engage in such servant leadership style (Fridell et al. 2009). While servant leadership is related to CEO humility, it is expected that female CEOs would have higher levels of CEO humility. Other studies suggest that women are more modest in self-presentation than men (Exline & Geyer, 2004), and score higher on measures of other-reported expressed humility (Owens et al., 2013).

Additionally, the study only examined public companies due to accessibility of data. It was noted in Study 1, that a noteworthy portion of CEOs in the high humility group were in private companies. While the sample was too small to statistically test for group differences, future research is needed to determine if highly humble CEOs

typically prefer to manage private or family owned companies and if so, then what is the reasoning behind this behavior. Another possibility is that CEOs of private companies have sufficient managerial discretion which allows the studies to detect CEO effects (Li and Tang, 2010). There are studies that have found significant results for CEO humility using only samples of private companies (Ou et al, 2014).

Implications for Theory

Overall, the study contributed to the management field in several ways. First, as the body of empirical research on humility becomes more available, researchers need to be able to detect different manifestations of humility at different organizational levels. My study adds to this growing collection of research by focusing on humility at the CEO level. My study positioned humility as a virtue, and a dimension of character, building on studies of the “bright” side of leadership. In contrast to the abundance work that has looked at humility at supervisory levels of the organization (Ou et al, 2014; Owens & Hekman, 2012; Owens et al, 2013), this study conceptualized a more refined and nuanced multidimensional definition humility at the upper echelon level encompassing five dimensions: (1) self-awareness, (2) appreciation of others, (3) teachability (4) low self-focus and (5) self-transcendent pursuits. This refined multidimensional definition of CEO humility integrates the existing research on humility and clearly delineates the boundaries between humility and other related constructs.

Second, this study provided the first step in unraveling the benefits and disadvantages for an organization of having a top manager who is humble by suggesting the positive impact of CEO humility on performance and the enhancing quality of CEO

humility on grandiose narcissism's effect on performance. My study suggests that CEO humility has a positive effect on the organization's bottom line and it is beneficial for organizations to have humble CEOs at the helm. This evidence for the impact of CEO humility on firm performance is a first of its kind as previous research has stayed within the bounds of the firm and examined outcome variables such as empowering leadership behaviors, TMT integration (Ou et al, 2014), follower engagement (Owens & Hekman, 2012) employee retention, job satisfaction and employee engagement (Owens et al, 2013). Organizations can also enhance positive effects of a CEO's grandiose narcissism with humility and enjoy even greater financial rewards.

The study gives useful direction to future research by suggesting the negative impact of CEO humility on competence's effect on performance. The preliminary results suggest that organizations should be aware of a negative impact of CEO humility on the negative relationship between competence and firm performance. From this, organizations should be aware of the prospective impact of the various types of competence on firm performance, such as the potentially negative impact of educational competence, and how the humility of the CEO will affect this relationship.

Third, my study explored contingencies associated with humility by addressing "when" questions about the coexistence and combined effects of CEO humility, CEO narcissism, and CEO competence. This work suggests that, while seeming paradoxical, humility and narcissism can co-exist and are not opposite constructs on the same spectrum. This contributes to both established research in narcissism and the fledging research in humility and advances the concept that CEO traits such as humility and

narcissism are best viewed through a more holistic and contingent view that exposes the complexities of CEOs.

My dissertation extended beyond recommendations of “the more the better” to provide a more realistic and nuanced picture of the complexities of top leaders’ characteristics. The study gives useful direction a more holistic view of the CEO that can help explain why some CEOs that share the same trait, such as Gregg Steinhafel of Target and Warren Buffet of Berkshire Hathaway who are both known for their humility, can experience vastly different results, in this case the firing of Steinhafel after Target’s data breach and the continued financial success of Buffet. By examining the joint effects of CEO humility, narcissism, and competence, I contributed to the emerging debate about the entanglement between leader character and leader competences. My study suggests that while character, in this case humility, matters by itself, character matters even more in relation to leader competences.

On the empirical side, an important contribution of this study is that in response to the scarce measures of humility that are limited to survey data and have not been developed to capture humility in upper echelons, I developed a new measure of CEO humility behaviors that uses unobtrusive data. This is the first measure of its kind in the field and I encourage other researchers to use this measure as it offers a multidimensional view of CEO humility that can be measured unobtrusively. This enables future researchers to be able to advance theory with a measure for CEO humility that can complement the existing humility survey scales. This study provided a fledging foundation for an omnibus humility measure using unobtrusive measures while giving direction to future studies of the various subtypes of humility. While it is the first

measure of its kind, there are weaknesses in that the measure needs to have stronger predictability. In the four hypotheses that used the CEO humility measure (hypothesis 1, hypothesis 2, hypothesis 4 and hypothesis 6), hypotheses 1 and 2 showed partial support; with a larger sample, I would expect hypothesis 4 (the impact of CEO humility on the relationship between vulnerable narcissism and firm performance) to be stronger; while I expect different results for hypothesis 6 (the impact of CEO humility on the relationship between competence and firm performance) with a more precise measure of CEO competence.

This study provides useful directions for future research through the preliminary findings of the post hoc analyses. These analyses suggest that CEO humility positively moderates the negative relationship between CEO vulnerable narcissism and firm performance such that highly humble CEOs could potentially counteract the negative effects of vulnerable narcissism on firm performance. The post hoc results also highlight a potential need for examining CEO competence more precisely, as different types of CEO competence have the potential to impact firm performance in opposite directions. Finally, the results lay the groundwork for examining different factors of humility via potential subtypes.

Implications for Management Practice

This research has relevant implications for managers and for leadership development programs at the highest levels of organizations by providing direction on when the leadership traits of humility, narcissism, and competence work in harmony together or in discord, and by highlighting which combinations are advantageous and

which are to be avoided. My study suggests that companies can experience firm success if they have a CEO with high levels of humility leading the organization. In addition to bringing prosperity to the firm in terms of financial performance, these humble CEOs have also been seen to bring success within the firm in that they increase follower engagement (Owens & Hekman, 2012) empowering followers, enhance TMT integration (Ou et al, 2014), and increase employee retention, job satisfaction and employee engagement (Owens et al, 2013).

Firms should be aware that CEOs likely can be both humble and narcissistic. When companies have CEOs who are grandiose narcissists, my study suggests that they can enhance the firm performance of such CEOs by increasing their levels of humility. As humility is not a static trait, but can be learned and increased, companies can require CEOs to undertake humility training. This study suggests that CEO humility is not merely a nice to have option, but a critical resource that enhances the company. This challenges conventional thinking about the role of humility in business by showing that narcissism by itself does not necessarily provide the best value for the organization, and that when humility is present that the combination likely brings increased firm performance.

Directions for Future Research

Future studies include replication of the performance model with a larger sample. This will allow more degrees of freedom and increase the power of the study. This replication will be statistically tested with regression and with PLS to take advantage of the ability of PLS to handle small sample sizes. The larger sample would also include

female CEOs and could examine if female CEOs typically score higher in humility measures than male CEOs. Future research opportunities exist to refine the proxy choices for the dimensions of humility, as even though the humility index was significantly different for high and low humble groups of CEOs the index had low predictive power for the outcome variable. More research is needed to determine if other proxies could strengthen this predictive power with firm performance.

Additionally, future research is needed to determine the effects of CEO humility on firm performance due to the trait of CEO humility and the effects of CEO humility on performance due to the perception of humility by others. As discussed earlier, humility is incorrectly viewed as a weakness or low self esteem. Hence, when others hear someone being described as humble, especially a CEO, they may infer that the person has low self esteem. This incorrect assumption can lead to the humble person having a negative view in the eyes of others. This is especially salient with stockholders and firm performance, as if the stockholders see any indication of weakness in the CEO, their response can have adverse implications for the firm.

In Study 1, it was noted that a large portion of CEOs in the high humility group were in private companies. Future research is needed to determine if highly humble CEOs typically manage private or family owned companies and if so, then what is the reasoning behind this behavior. Future studies could also look at mediating factors and more proximal outcome variables of CEO humility such as company culture, organizational learning, perceived organizational support and employee attraction and retention. The opportunity to explore how context affects the impact of CEO humility is ripe. Researchers can examine how industry type, environmental demands and culture

(see Oc et al, 2015 for exception) make an impact on the effectiveness of CEO humility. This is especially important considering the fast moving global environment that many firms find themselves operating in.

Further research is needed to explore the results of the post-hoc studies that examined the five dimensions of humility and their impact on firm performance, as well as the impact on performance of the humility factors determined from factor analysis. There is fertile ground for extending this research to defining subtypes of CEO humility and how these subtypes interact with each other and with the omnibus definition of CEO humility. This research would follow in a similar manner the research on narcissism and the two subtypes: grandiose and vulnerable. Research on the potential subtypes of humility can help reconcile paradoxical definitions of humility and empirical results of humility. This research is best done while the stream on humility is still young and foundation is just beginning to be formed in the management domain.

Conclusions

This study advanced the view of the holistic CEO by considering CEO traits not in isolation, but in harmony with each other to examine the unique interplay between the traits and outcome variables. This dissertation helped to clear many of the conceptual misconceptions about what humility actually is by offering a more refined and nuanced classification of CEO humility with a multidimensional definition. This study also helped to demonstrate how a humble CEO could benefit or harm a firm's performance, by suggesting that a humble CEO benefits firm performance. I argued that humility and narcissism are not opposite constructs on the same spectrum but that CEO humility can

coexist with CEO grandiose narcissism. Furthermore, my study suggests that the most benefit for companies occurs when the CEO embodies a combinations of these characteristics as a humble CEO that also has levels of grandiose narcissism brings greater financial returns to the company than a CEO that had either one of these characteristics alone. This moves away from “the more the better” prescriptions to provide a more realistic picture of the complexities of top leaders.

This research highlighted the need to consider the differential effects of each dimension of humility on the outcome variables, as many of the dimensions of humility suggested positive returns on firm performance in cases when the humility index did not. Additionally, the study presented the possibility of the existence of humility subtypes based on the post hoc factor analysis and differential impact of the humility indicators. Finally, the study drew attention to the need to consider the effects of each type of competence on the outcome variables as opposed to an omnibus measure of competence, as the various types of competence had potentially different and sometimes counteracting effects on the outcomes of the firm. In conclusion, humility is a virtue worth pursuing at the highest levels of the organization.

REFERENCES

- Ashton, M. C., & Lee, K. 2005. Honesty-humility, the big five, and the five-factor model. **Journal of personality**, 73(5): 1321–53.
- Avolio, B. J., & Gardner, W. L. 2005. Authentic leadership development: Getting to the root of positive forms of leadership. **Leadership Quarterly**, 16: 315-338.
- Barbuto, J., & Wheeler, D. 2006. Scale development and construct clarification of servant leadership. **Group & Organization Management**, 31(3): 300–326.
- Barclay, D., Higgins, C., & Thompson, R. 1995. The partial least squares (PLS) approach to causal modeling: Personal computer adoption and use as an illustration. **Technology studies**, 2(2), 285-309.
- Barney, J. 1991. Firm resources and sustained competitive advantage. **Journal of Management**, 17(1): 99-120.
- Baumeister, RF, Jones, EE. 1978. When self-presentation is con strained by the target's knowledge: Consistency and compensation. **Journal of Personality and Social Psychology**. 36(6):608–618.
- Baumeister, R. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. **Psychological Review**, 103, 5–33
- Blettner, D. 2012. The CEO performance effect: statistical issues and a complex fit perspective. **Strategic Management Journal**, 33: 986–999.
- Byrne, K. A., & Worthy, D. A. 2013. Do narcissists make better decisions? An investigation of narcissism and dynamic decision-making performance. **Personality**

- and Individual Differences**, 55(2): 112–117.
- Cameron, K. 2012. **Positive leadership: Strategies for extraordinary performance**. Berrett-Koehler Store.
- Cameron, K. S., & Spreitzer, G. M. (Eds.). (2011). **The Oxford handbook of positive organizational scholarship**. Oxford University Press.
- Campbell, K. W., Goodie, A. S. & Foster, J. D. 2004. Narcissism, confidence, and risk attitude. **Journal of Behavioral Decision Making**, 17: 297–311.
- Campbell, W. K., Hoffman, B. J., Campbell, S. M., & Marchisio, G. 2010. Narcissism in organizational contexts. **Human Resource Management Review**, 21(4): 268–284.
- Carpenter, M. A., M. A. Geletkanycz, and G. M. Sanders. 2004. Upper echelons research revisited: Antecedents, elements and consequences of top management team composition.” **Journal of Management**, 30: 749–778.
- Casciaro, T., & Sousa-Lobo, M. 2005. Competent jerks, lovable fools, and the formation of social networks. **Harvard Business Review**, 83, 92–99.
- Chatterjee, A., & Hambrick, D. 2007. It’s all about me: Narcissistic chief executive officers and their effects on company strategy and performance. **Administrative Science Quarterly**, 52(3): 351–386.
- Cheetham, G., & Chivers, G. 1996. Towards a holistic model of professional competence. **Journal of European Industrial Training**, 20, 20-30.
- Cohen, J. (1977). **Statistical power analysis for the behavioral sciences** (rev. Lawrence Erlbaum Associates, Inc.
- Cohen, J., Cohen, P., West, S.G., and Aiken, L.S. 2003. **Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences** (3rd edition). Mahwah,

- NJ: Lawrence Earlbaum Associates.
- Collins, J. 2001. **Good to great**. New York: Harper Collins Publishers, Inc.
- Conger J.A. 1990. The dark side of leadership. **Organizational Dynamics**, 19, 44–55.
- Craig, R., & Amernic, J. 2011. Detecting Linguistic Traces of Destructive Narcissism At-a-Distance in a CEO's Letter to Shareholders. **Journal of Business Ethics**, 101(4): 563–575.
- Crossan, M., Mazutis, D., Seijts, G., & Gandz, J. 2013. Developing leadership character in business programs. **Academy of Management Learning & Education**, 12 (2): 285-305.
- Crossan, M., Gandz, J., & Seijts, G. 2012. Developing leadership character. *Ivey Business Journal*, 76(1), 3-8.
- Cuddy, A. J. C., Glick, P., & Beninger, A. 2011. The dynamics of warmth and competence judgments, and their outcomes in organizations. **Research in Organizational Behavior**, 31: 73–98.
- D'Aveni, R. A., & MacMillan, I. C. 1990. Crisis and the content of managerial communications: A study of the focus of attention of top managers in surviving and failing firms. **Administrative Science Quarterly**, 35, 634-657.
- Dahling, J. J., Whitaker, B. G., & Levy, P. E. 2008. The Development and Validation of a New Machiavellianism Scale. **Journal of Management**, 35(2): 219–257.
- De Vries, M. F. K. 1994. The leadership mystique. **The Academy of Management Executive**, 8(3), 73-89.
- Dutton, J. E., & Sonenshein, S. 2007. Positive organizational scholarship. In S. Lopez & A. Beauchamps (Eds.), **Encyclopedia of positive psychology**. Malden, MA:

- Blackwell Publishing.
- Exline, J., & Geyer, A. 2004. Perceptions of humility: A preliminary study. **Self and Identity**, 3: 95-115
- Finkelstein, S. 1992. Power in top management teams: Dimensions, measurement, and validation. **Academy of Management Journal**, 35, 505–538.
- Finkelstein, S., & Hambrick, D. C. 1990. Top-Management-Team Tenure and Organizational Outcomes - the Moderating Role of Managerial Discretion. **Administrative Science Quarterly**, 35(3), 484-503.
- Fridell, M., Belcher, R. N., & Messner, P. E. 2009. Discriminate analysis gender public school principal servant leadership differences. **Leadership & Organization Development Journal**, 30(8), 722–736.
- Galvin, B. M., Waldman, D. a., & Balthazard, P. 2010. Visionary communication qualities as mediators of the relationship between narcissism and attributions of leader charisma. **Personnel Psychology**, 63(3).
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. 2005. “Can you see the real me?” A self-based model of authentic leader and follower development. **The Leadership Quarterly**, 16(3): 343–372.
- Geis, F. L., & Moon, T. H. 1981. Machiavellianism and deception. **Journal of Personality and Social Psychology**, 41(4): 766–775.
- Gerstner, W.C., Konig, A., Enders, A., & Hambrick, D. C. 2013. CEO Narcissism, Audience Engagement, and Organizational Adoption of Technological Discontinuities. **Administrative Science Quarterly**, 58(2): 257–291.
- Gillet, J., Cartwright, E., & Vugt, M. Van. 2011. Selfish or servant leadership?

- Evolutionary predictions on leadership personalities in coordination games. **Personality and Individual Differences**, 51(3): 231–236.
- Graham, J. W. 1991. Servant-leadership in organizations: Inspirational and moral. **Leadership Quarterly**, 2(2): 105-119.
- Greenleaf, R. K.: 1970/1991, *The Servant as a Leader* (Robert K Greenleaf Center for Servant Leadership, Indianapolis, IN).
- Grenberg, J. M. 2005. **Kant and the ethics of humility: A story of dependence, corruption and virtue**. Cambridge, MA: Cambridge University Press.
- Hambrick, D. C., & Mason, P. 1984. Upper echelons: The organization as a reflection of its top managers. **Academy of Management Review**, 9: 193-206.
- Harms, P., & Lebreton, J. M. 2014. The dark side of personality at work Dark Personality : What Is Known. **Journal of Organizational Behavior**, 35: S41–S60.
- Harvey, J., & Pauwels, B. 2004. Modesty, humility, character strength, and positive psychology. **Journal of social and clinical psychology**, 23(5): 620–623.
- Hendin, H. M., & Cheek, J. M. 1997. Assessing hypersensitive narcissism: A re-examination of Murray's Narcissism Scale. **Journal of Research in Personality**, 31, 588–599.
- Houlcroft, L., Bore, M., & Munro, D. 2012. Three faces of Narcissism. **Personality and Individual Differences**, 53(3): 274–278.
- House, R. J., Spangler, W. D., & Woycke, J. 1991. Personality and charisma in the US presidency: A psychological theory of leader effectiveness. **Administrative Science Quarterly**, 36(3): 364–396.

- Huprich, S., Luchner, A., & Roberts, C. 2012. Understanding the association between depressive personality and hypersensitive (vulnerable) narcissism : Some preliminary findings. *Personality and Mental Health*, 6: 50–60.
- Kjellson, I., & Meer, M. van der. 2012. The Impact of Narcissistic and Humble Leadership Styles: Examining employee satisfaction and the role of the family business. Jönköping University.
- Lamkin, J., Clifton, A., Campbell, W. K., & Miller, J. D. 2013. An Examination of the Perceptions of Social Network Characteristics Associated With Grandiose and Vulnerable Narcissism. *Personality disorders*.
- Lannin, D. G., Guyll, M., Krizan, Z., Madon, S., & Cornish, M. 2014. When are grandiose and vulnerable narcissists least helpful? **Personality and Individual Differences**, 56: 127–132.
- Le Deist, F. D., & Winterton, J. 2005. What is competence? **Human Resource Development International**, 8, 27-46.
- Li, J., and Y. I. Tang. 2010. CEO hubris and firm risk taking in China: The moderating role of managerial discretion. **Academy of Management Journal**, 53: 45–68.
- Liden, R. C., Wayne, S. J., Zhao, H., & Henderson, D. 2008. Servant leadership: Development of a multidimensional measure and multi-level assessment. **The Leadership Quarterly**, 19(2): 161–177.
- Lindsay, R. M. (1993). Incorporating statistical power into the test of significance procedure: A methodological and empirical inquiry. **Behavioral Research in Accounting**, 5(1), 211-36.
- Lohmoller, J.B. 1989. **Latent variable path modeling with partial least squares**.

- Heidelberg, Germany: Physcia-Verlag.
- Lubit, R. 2002. The long-term organizational impact of destructively narcissistic managers. **Academy of Management Executive**, 16 (1): 127–138.
- Maccoby, M. 2004. Narcissistic leaders: The incredible pros, the inevitable cons. **Harvard Business Review**, 82(1): 92–101.
- Maccoby, M., & Conrad, C. 2003. **The productive narcissist: The promise and peril of visionary leadership**. New York, NY: Broadway Books.
- Maldonado, T. 2012. The Impact of Humble Corporate Cultures and Humble Strategic Leadership. Working Paper, University of Houston.
- Malkin, M. L., Zeigler-Hill, V., Barry, C. T., & Southard, A. C. 2012. The View From The Looking Glass: How Are Narcissistic Individuals Perceived by Others? **Journal of personality**.
- May, D.R., Chan, A., Hodges, T. & Avolio, B.J. 2003. Developing the moral component of authentic leadership. **Organizational Dynamics**, 32, 247–60.
- Miller, J. D., Hoffman, B. J., Gaughan, E. T., Gentile, B., Maples, J., & Keith Campbell, W. 2011. Grandiose and vulnerable narcissism: a nomological network analysis. **Journal of Personality**, 79(5): 1013–42.
- Miller D, & Lee J. 2001. The people make the process: Commitment to employees, decision making, and performance. **Journal of Management**, 27, 163–189.
- Miller, J. D., Price, J., Gentile, B., Lynam, D. R., & Campbell, W. K. 2012. Grandiose and vulnerable narcissism from the perspective of the interpersonal circumplex. **Personality and Individual Differences**, 53(4): 507–512.
- Morris, J. A., Brotheridge, C. A. M., & Urbanski, J. 2005. Bringing humility to

- leadership: Antecedents and consequences of leader humility. **Human Relations**, 58(10): 1323–1350.
- Neuvicka, B., De Hoogh, A.H.B., Van Vianen, A.E.M., Beersma, B. & McIlwain, D., 2011. All I need is a Stage to Shine: Narcissists' Leader Emergence and Performance. **The Leadership Quarterly**, 22, pp. 910-925.
- Ng, H. K. S., Tam, K.-P., & Shu, T.-M. 2013. Narcissism and punitiveness in a non-ego-threatening condition. **Personality and Individual Differences**, 54(3): 442–446.
- Nielsen, R., Marrone, J. a., & Slay, H. S. 2009. A New Look at Humility: Exploring the Humility Concept and Its Role in Socialized Charismatic Leadership. **Journal of Leadership & Organizational Studies**, 17(1): 33–43.
- O'Boyle, E. H., Forsyth, D. R., Banks, G. C., & McDaniel, M. a. 2012. A meta-analysis of the Dark Triad and work behavior: a social exchange perspective. **The Journal of applied psychology**, 97(3): 557–79.
- Oc, B., Bashshur, M. R., Daniels, M. a., Greguras, G. J., & Diefendorff, J. M. 2015. Leader humility in Singapore. **The Leadership Quarterly**, 26(1): 68–80.
- Organ, D., & Ryan, K. 1995. A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. **Personnel Psychology**, 48: 775-802
- Ou, Y. 2011. CEO Humility and Its Relationship with Middle Manager Behaviors and Performance : Examining the CEO-Middle Manager Interface. **Proquest Dissertations & Theses**: Arizona State University.
- Ou, A. Y., Tsui, A. S, Kinicki, A., Waldman, D. Song, L. J., & Xiao, Z.X. 2013. Understanding humble chief executive officers: Connections to top management team

- integration and middle manager responses. **Administrative Science Quarterly**.
- Owens, B. 2009. Humility in organizational leadership, **Proquest Dissertations & Theses**: University of Washington.
- Owens, B. P. 2012. Synergistic and paradoxical leader trait couplings: The synergy of humility and competence and the paradox of humility and narcissism. Presented at Academy of Management, Boston, MA.
- Owens, B. P., & Hekman, D. R. 2012. Modeling How to Grow : An Inductive Examination of Humble Leader Behaviors , Contingencies , and Outcomes. **Academy of Management Journal**, 55(4).
- Owens, B. P., Johnson, M., & Mitchell, T. 2013. Expressed Humility in Organizations: Implications for Performance, Teams, and Leadership. **Organization Science**, 1–22.
- Owens, B.P., Rowatt, W.C., & Wilkins, A.L. 2011. **Exploring the relevance and implications of humility in organizations**. In K.S. Cameron & G.S. Spreitzer (Eds.), *Handbook of Positive Organizational Scholarship*. Oxford: Oxford University Press.
- Park, D., & Berger, B. 2004. The presentation of CEOs in the press, 1990-2000: increasing salience, positive valence, and a focus on competence and personal dimensions of image. **Journal of Public Relations Research**, 16(1): 37–41.
- Park, N., & Peterson, C. 2003. **Virtues and organizations**. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline*: 33-47. San Francisco: Berrett-Koehler.
- Paulhus, D. L., & Williams, K. M. 2002. The Dark Triad of personality: Narcissism, Machiavellianism, and psychopathy. **Journal of Research in Personality**, 36(6): 556–563.

- Peterson, C., & Seligman, M. E. P. 2004. **Character strengths and virtues**. New York: Oxford University Press.
- Pincus, A. L., Ansell, E. B., Pimentel, C. A., Cain, N. M., Wright, A., & Levy, K. N. 2009. Initial construction and validation of the Pathological Narcissism Inventory. **Psychological Assessment**, 21, 365–379.
- Pollach, I., & Kerbler, E. 2011. Appearing Competent: A Study of Impression Management in U.S. and European CEO Profiles. **Journal of Business Communication**, 48(4): 355–372.
- Priem, R. L., Lyon, D. W., & Dess, G. G. 1999. Limitations of demographic proxies in top management team heterogeneity research. **Journal of Management**, 25, 935–953.
- Quatro, S, Waldman, D, & Galvin, B. 2007. Developing holistic leaders: Four domains for leadership development and practice. **Human Resource Management Review**, 17(4): 427–441.
- Reed, L. L., Vidaver-Cohen, D., & Colwell, S. R. 2011. A New Scale to Measure Executive Servant Leadership: Development, Analysis, and Implications for Research. **Journal of Business Ethics**, 101(3): 415–434.
- Resick, C. J., Whitman, D. S., Weingarden, S. M., & Hiller, N. J. 2009. The bright-side and the dark-side of CEO personality: examining core self-evaluations, narcissism, transformational leadership, and strategic influence. **Journal of Applied Psychology**, 94(6): 1365–81.
- Rajagopalan, N., & Datta, D. K. (1996). CEO characteristics: Does industry matter? **Academy of Management Journal**, 39, 197-215.

- Rich, B., Lepine, J., & Crawford, E. 2010. Job Engagement: Antecedents and Effects on Job Performance. **The Academy of Management Journal**, 53:3, 617-635.
- Rosenthal SA, & Pittinsky TL. 2006. Narcissistic leadership. **Leadership Quarterly**. 17(6):617–633
- Saks, Alan M. 2006. Antecedents and consequences of employee engagement. **Journal of Managerial Psychology**, 21: 7, 600 – 619
- Sandberg, J., & Pinnington, A. H. 2009. Professional competence as ways of being: An existential ontological perspective. **Journal of Management Studies**, 46, 1138-1170.
- Schnake, M. 1991. Organizational citizenship: A review, proposed model, and research agenda. **Human Relations**, 44: 735-759.
- Sendjaya, S., Sarros, J. C., & Santora, J. C. 2008. Defining and measuring servant leadership behavior in organizations. **Journal of Management Studies**, 45:402-424.
- Shrout, P. E., & Bolger, N. 2002. Mediation in experimental and nonexperimental studies: New procedures and recommendations. **Psychological Methods**, 7: 422-445.
- Spangler, W. D., Gupta, A., Kim, D. H., & Nazarian, S. 2012. Developing and validating historiometric measures of leader individual differences by computerized content analysis of documents. **The Leadership Quarterly**, 23(6), 1152-1172.
- Spangler, W. D., & House, R. J. 1991. Presidential effectiveness and the leadership motive profile. **Journal of Personality and Social Psychology**, 60(3): 439–455.
- Staw, Barry M., McKechnie, Pamela I. & Puffer, Sheila M. 1983. The justification of organizational performance. **Administrative Science Quarterly**, 28: 582-600.
- Tang, Y., Li, J., & Yang, H. 2012. What I See, What I Do: How Executive Hubris Affects Firm Innovation. **Journal of Management**.

- Tangney, J. P. 2000. Humility: Theoretical perspectives, empirical findings and directions for future research. **Journal of Social and Clinical Psychology**, 19: 70-82.
- Tangney, J. P. 2002. Humility. In C. R. Snyder, & S. J. Lopez (Eds.), **Handbook of Positive Psychology**: 411–419. New York: Oxford University Press.
- Van Dierendonck, D. 2010. Servant Leadership: A Review and Synthesis. **Journal of Management**, 37(4): 1228–1261.
- Van Dierendonck, D., & Nuijten, I. 2011. The Servant-Leadership Survey (SLS): Development and validation of a multidimensional measure. **Journal of Business and Psychology**, 26: 249-267.
- Verbos, A., Gerard, J., Forshey, P., Harding, C., & Miller, J. 2007. The positive ethical organization: Enacting a living code of ethics and ethical organizational identity. **Journal of Business Ethics**, 76: 17–33
- Vera, D., & Rodriguez-Lopez, A. 2004. Strategic virtues: Humility as a source of competitive advantage. **Organizational Dynamics**, 33: 393-408.
- Wales, W. J., Patel, P. C., & Lumpkin, G. T. 2013. In Pursuit of Greatness: CEO Narcissism, Entrepreneurial Orientation, and Firm Performance Variance. **Journal of Management Studies**, 50(6): 1041–1069.
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. 2008. Authentic leadership: Development and validation of a theory-based measure. **Journal of Management**, 34: 89-126.
- Wiersema, M. F., and K. A. Bantel 1992. Top management team demography and corporate strategic change. **Academy of Management Journal**, 35: 91–121.
- Wold, H. 1985. **Partial least squares**. Encyclopedia of statistical sciences.

Wooten, L. P., & James, E. H. 2008. Linking crisis management and leadership competencies: The role of human resource development. **Advances in Developing Human Resources**, 10(3), 352-379.

Appendix A: Existing Humility Measurements in the Literature

Owens et al, 2013: Survey Scale

This person actively seeks feedback, even if it is critical.

This person admits it when they don't know how to do something.

This person acknowledges when others have more knowledge and skills than him- or herself.

This person takes notice of others' strengths.

This person often compliments others on their strengths.

This person shows appreciation for the unique contributions of others.

This person is willing to learn from others.

This person is open to the ideas of others.

This person is open to the advice of others.

Ou et al, 2014: Coding for Interviews

	Low humility	High humility
Self-concept (transcendent self- concept)	More likely to believe in personal capability.	More likely to believe man is under certain constraints.
Reflexive consciousness (self-awareness and openness to feedback)	More emphasis on strengths and less on weaknesses. Weaknesses identified are more like strengths in disguise. More likely to attribute problems to external forces. Less likely to see constraints on organization's future.	Acknowledge strengths, but also objectively acknowledge weaknesses. Keen on learning new knowledge. Objectively see constraints on organizations' future.
Interpersonal being (appreciation of others)	See more weaknesses. Less appreciation of the TMTs' capability. Tend to make decisions by themselves and ask the TMT members to implement.	See more strengths. More appreciation of the TMTs' capabilities. See TMT members compensate for the CEOs' weaknesses. Tend to withdraw from making decisions alone and to empower TMT members to make decisions together.
Executive function (low self-focus and self- transcendent pursuit)	More likely to mention self-related pursuits. More likely to emphasize their own achievement.	More likely to mention grand vision beyond individual gain. More likely emphasize Responsibilities toward others.

Oc et al, 2014, Coding Dimensions

Having an accurate view of self	Self-aware and truthful about own competency and weakness (e.g., acknowledging that he/she is only human and has flaws too.)
Recognizing follower strengths and achievements	Enabling followers to act and inspiring them to do greater things, recognizing others for their accomplishments (e.g., a humbler leader acknowledges contributions from his/her followers when he/she succeeds.)
Modeling teachability and being correctable	Accepting feedback regarding his/her own performance, even from subordinates and using that feedback to change his/her behavior (e.g., a humble leader is one who is willing to listen and learn from followers.)
Leading by example	Leading by example and being a hands-on leader (e.g., a humble leader is someone who is willing to do the things that he/she is asking his/her follower to do, even things like taking minutes of meeting, doing PowerPoint slides etc.)
Showing modesty	Willing to let his/her teammates shine, someone who does not prefer to be in the limelight all the time (e.g., a humble leader is someone who keeps a low profile even when successful.)
Working together for the collective good	Being able to work together with his/her staff to achieve a common goal (e.g., a humble leader would stay late with his/her staff to help complete a project)
Empathy and approachability	Understanding, showing empathy and leading with high emotional quotient, being available for staff to share problems (e.g., a humble leader would be kind and caring for his/her followers.)
Showing mutual respect and fairness	Treating others with respect (e.g., a humble leader must also be impartial in treatment towards his/her followers.)
Mentoring and coaching	Approaching leadership through mentorship, guidance and empowerment (e.g., a humble leader is able to coach employee on their personal developments.)